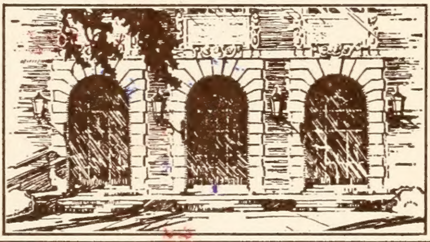


VOLUME 7, NUMBER 1, FALL 1971

THE INTERNATIONAL JOURNAL OF ACCOUNTING

EDUCATION AND RESEARCH

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

CENTER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING OF THE COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION

The Center for International Education and Research in Accounting was established to foster the international development of education and research in the accounting discipline, to provide a base for the international exchange of ideas and materials relating to accounting education, to encourage and assist both accounting faculty personnel and students from other countries to come to the University of Illinois for study and research in accounting, and to provide faculty members for assignment to universities in other countries.

The Center, functionally and administratively, is a constituent part of the Department of Accountancy and the College of Commerce and Business Administration of the University of Illinois. The graduate training of a substantial number of international students has been an important activity of the Department for many years.

One of the specific goals of the Center is the publication of reports, booklets, and monographs which further the cause of advanced education and research in accounting.

V. K. Zimmerman, *Director*

The International Journal of Accounting *Education and Research* is published semiannually, spring and fall, by the Center for International Education and Research in Accounting, College of Commerce and Business Administration, University of Illinois. Subscription rates are $3.00 per year. Single copy price is $1.80. Copies of prior issues are still available.

Manuscripts and communications for the Editor and business correspondence should be addressed to **The International Journal of Accounting** *Education and Research*, 320 Commerce West, University of Illinois, Urbana, Illinois 61801.

103

THE INTERNATIONAL JOURNAL OF ACCOUNTING

EDUCATION AND RESEARCH

Volume 7 · Number 1 · Fall 1971

CENTER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Contents

Toward a General Theory of Accounting

TREVOR E. GAMBLING*

INTRODUCTION

It is clear that the sciences of economics and accounting must have common ground; regrettably it has not proved an easy matter to establish what this ground might be. Probably this is because accounting was almost fully developed in its present form when economic theory began to develop in a society and at a time when empirical investigation of commercial matters was scarcely conceivable.

One of the more fruitful avenues between economics and accounting has been provided by what might be called macroaccounting techniques. Double-entry accounting statements for conglomerate entities can be prepared without direct reference to the underlying records of individual members. The most obvious example is in the preparation of final accounts of the individual companies. However, a similar process can be observed when the so-called "National Income Accounts" are prepared since these too are based upon the summarized data supplied to various governmental agencies by individual trading and manufacturing enterprises. The processes of economic planning rely heavily on this technique of providing data for the government, whether the plan

* Trevor E. Gambling is Head of the Department of Accounting of the University of Birmingham, England. He has traveled quite extensively in the Soviet Union and East Europe to study noncapitalist management methods. Professor Gambling has developed a business game based on the activities of Soviet enterprises. Recently, he has studied other noncapitalist societies, especially those in Africa. The Department of Accounting of the University of Birmingham is currently developing a close relationship with the Ahmadu Bello University at Zaria, Nigeria. In 1966–67, Professor Gambling was a visiting associate professor of the School of Business Administration of the University of California at Berkeley and during the second semester of 1971–72 was a visiting professor of accountancy at the University of Illinois at Urbana-Champaign.

is a direct mandatory one, as in the Soviet Union, or an indirect one, as in France or the United Kingdom. In developed industrial countries such as these, the degree of aggregation must be very high; and while it is extremely likely that the data used will contain sizable errors of omission, double-counting, or misspecification, the number of enterprises involved may offset these. In a smaller nonindustrialized community, however, such as the typical "developing nation," the connection between individual enterprises and the national accounts tends to be much closer, and errors might well have a more important effect on the outcome.

Closer investigation of these "errors" suggests that they do not all arise from carelessness of preparation. Were this the case, the errors would tend to offset each other from year to year, even where the number of observations in any one year were insufficient to eliminate such errors immediately. These errors may be attributable, in part to deliberate bias, an aspect of macroaccounting which has already been extensively discussed elsewhere.[1] Another element in any aggregation of enterprise results which lead to error in macroaccounting and planning lies in the realm of accounting theory — what the data are thought to signify.

THE DEVELOPMENT OF ACCOUNTING THEORY

One interesting point is the existence of any need for a theory of accounting at all. One might suppose that accounting was simply a function of middle management, such as production scheduling or credit control, dealing with self-evident facts which could be carelessly and even fraudulently stated, but whose significance experienced men of goodwill could rapidly agree once in possession of "all the facts." That this approach to accounting theory is held universally in the Soviet Union, and as far as can be judged in most underdeveloped countries of the world, has been noted elsewhere.[2]

Further enquiries suggest that Soviet managers are now ceasing to view accounting results in this uncritical light. This is because their premiums or bonuses, and those of their workers, are becoming dependent upon the profits revealed in the accounts. At the same time, there are proposals that Soviet business taxation should be based upon the

[1] See, for example, O. Morgenstern, On the Accuracy of Economic Observations, 2nd ed. (Trenton, N.J.: Princeton University Press, 1963).

[2] Trevor E. Gambling, "Accounting Theory and Noncapitalist Societies," *Great Britain-USSR,* Autumn 1970, pp. 3–4.

value of the resource employed, as well as on the profits. It follows that so long as accounting is used for its original purpose of providing control over legally created assets, such as debtors, creditors, and cash, no problems arise over the interpretation of the output. When accounting records are extended to reflect the economic well-being of the enterprise, however, disputes arise as to the true measuring of the contents of its accounting system. This is almost certainly because in its origin, accounting was concerned solely with this element of control over legal rights.

Financial control was a significant contribution to the present structure of the world, since this earlier aspect of double-entry accounting was probably the development which made modern industrial capitalism a feasible system.[3] Before it became possible to control relatively informal commercial contracts in this way, credit could only be treated by preparing elaborate legal documents and by using devices such as tallies; these items had to be safeguarded carefully, since they were all the evidence which could support claims arising from the contract.[4]

In time, commercial and industrial activity expanded beyond the limit which could readily be financed by a sole trader. Moreover, the undertakings grew so as to require continuous investment, and something more than a joint venture account was needed to enable payment of dividends to the various interests within the enterprise in other than a final liquidation. It seemed reasonable at the time to utilize for this purpose the "over halves" of the bookkeeping entries, which hitherto had been posted indifferently to the proprietor's capital account. In this way the present-day cost-based accrual accounting was developed from the original "Italian bookkeeping" technique.

THE REALITY OF ACCOUNTING INFORMATION

It is important to appreciate the essential difference between these two usages of accounting data and to see how this difference results in reliable data for the former purpose and highly debatable data for the latter. The ledger accounts of credit and banking transactions *are* the entities they seek to describe and control. Today it is possible to speak of a debt which is not recorded in any set of books, but this is only possible because such debts commonly *are* recorded in books of account.

[3] W. Sombart, *Der moderne Kapitalismus,* 6th ed., vol. 2, no. 1 (Berlin: von Duncker & Humbolt, 1924).

[4] A. C. Littleton and B. S. Yamey, *Studies in the History of Accounting* (London: Butterworth, 1956).

In an earlier age we would have asked, "Where is the bond?", "Where is the Bill of Sale?", and so on.

On the other hand, the traditional accrual accounts are not the economic situation or history of the enterprise; as we have seen they are just the reanalyzed mirror image of the legal claims created by or against the enterprise. These accrual accounts usually represent the only comprehensive body of information that most enterprises possess concerning their own activities and in general it may be cheaper to use this information as a *rough guide* rather than to make a further ad hoc investigation. This is the point stressed by Ijiri when he describes accounts as surrogates which we can comprehend and manipulate in lieu of the underlying reality.[5] In fact we go further; we use the conventional data as if they were correct and accurate information in many cases. Ijiri notes that one should rationally weigh the improvement in the decision made against surrogate *and* surrogate against a simple random selection among alternatives.

If this were the total problem, there would be little need for this paper. If conventional accounts merely detailed the legal claims and liabilities of the enterprise and analyzed the changes which had occurred in the period since the last accounts, one might doubt whether these accounts were valuable statements for management purposes (as opposed to control); but they would be neutral, factual statements of what they purported to describe. These would be inadequate, however, for the secondary purpose for which conventional accounting was designed: the ascertainment of divisible profits. In the absence of scientific thought as to what profit really might be, and hence what it should include, it seems intuitively obvious that certain sorts of income and expenditure ought to be *excluded* for the computation and designated capital items. At the same time it is apparent that many of these capital items require replacement from time to time so that their (replacement) cost must be retained in the business if that business is to continue an indefinite life. Of course, this is the argument concerning the treatment of capital items which provides most of the problems which the conventional theory of accounting is seeking to resolve.

To arrive at a fairly acceptable definition of profit in economic theory is not difficult. For example, profit can be defined as "the amount which can be consumed during a period without reducing wealth."

[5] Yuji Ijiri, *The Foundations of Accounting Measurement* (Englewood Cliffs, N.J.: Prentice-Hall, 1967).

Since wealth is defined in terms, such as "the present value of the right to receive future benefits," the system involves discounting the value of future benefits back to the present. The practical difficulties of this approach have been explored and (hopefully) resolved in a number of papers which provide a vehicle for what might be called economic accounting.[6]

Unfortunately, this approach does not commend itself to the business community except when discounting cash flow (DCF) calculations are used to justify capital expenditures. The reason may be partly conservative as accrual accounting has been accepted for over three centuries. The main reason is probably a desire for what has been called isomorphism — the facility to identify profit or wealth with specific items on income and expenditure or pieces of plant, and so on. In the author's view this desire is simply not feasible, but the reason for its existence is understandable. The manager wishes to view his task as a series of simple subgoals, such as cost reduction, maximizing plant utilization, and increasing sales. The use of economic accounting as a measure of profit and wealth would force every manager to live in a world of pure long-range planning which many of them would find distinctly alarming.

THE SEARCH FOR A LOGICAL BASIS

Writers on accounting theory have largely accepted this view because they see profit and wealth as concepts which can be defined by some consensus of reputable authority. The construction of an accounting theory becomes a search for a series of postulates which, if accepted, provide the basis for a logical explanation of the current practice.

This idea of postulates forming a basis for a theory has a reputable ancestry. Starting from a few plausible but totally undemonstrable assumptions about points and straight lines, it is possible to construct the system of Euclidean geometry. Clearly, one can substitute different postulates and derive a different geometry. This process of creating a logical structure from postulates seems to be a very different matter from the searching for postulates which is such a feature of accounting theory. Accounting theorists make one strong assumption before they start; they

[6] Trevor E. Gambling, "Accounting Theory and Interrelated Processes," *Abacus,* 1969, pp. 78–87; and *Economic Accounting for Inflation and for Groups of Companies,* Discussion Paper, Series B, no. 16 (Birmingham, England: Faculty of Commerce and Social Science, University of Birmingham, 1969); P. Hansen, The Accounting Concept of Profit (Amsterdam: North Holland Publishing Co., 1962).

accept that the existing structure must *be* logical and hence that a consistent body of underlying postulates can be found. It is possible that the structure is not logical in the sense that it contains internal inconsistencies, and hence that the quest for consistent postulates is simply in vain. One could argue, however, that the discovery of these inconsistencies might lead to some revision of the current practice.

The purpose of this paper is not the assassination of Western accounting theory. It is necessary, however, to demonstrate that this theory is not something which has been constructed deliberately from universal and consistent postulates. Instead, it is the result of "jobbing backwards" from an existing practice, which seems to have evolved in response to the objectives, ideals, and attitudes of Western, industrial capitalism.

At various places in the *International Journal of Accounting,* Professor Seidler makes two opposing points:

1. It is not necessary for an expatriate Western teacher of business administration to concern himself too much with reconciling modern Anglo-American methods with those of local businessmen in developing countries. The graduates these schools produce are always hired by quite new, large-scale organizations, which are eager to adopt the new methodology.[7]

2. It is futile to introduce techniques which depend for their effectiveness upon social attitudes which are not present in the population. For example, it is this competitive desire for personal advancement which makes standard cost and budgetary control systems work; in many other cultures the idea of putting an individual "on the spot" and making him personally responsible for some failure of achievement would be a gross breach of etiquette.[8]

The two views are not inconsistent; the developing countries may well be trying to import Western "Big Business" into societies to which it is not really congenial. One might argue that developing countries could raise their standards of living very rapidly if only they would adopt the "Protestant ethic." Alternatively one might consider Japanese industry, where the idea of collective responsibility for almost everything seems to be fairly successfully wedded to the idea of personal endeavor. It follows that there are successful societies which are not industrial capitalist societies, and even industrial societies which do not conform significantly with the ideals of Western industrial capitalism.

[7] L. J. Seidler, "Teaching Business Administration Overseas: The Case for the Ugly American," *The International Journal of Accounting Education and Research* (Fall 1968):145–53.

[8] L. J. Seidler, "Nationalism and the International Transfer of Accounting Skills," *The International Journal of Accounting Education and Research,* Volume 5, Number 1 (Fall 1969) 35–45.

If it can be shown that conventional accounting practice has been dictated by the requirements of Western industrial capitalism, it follows that conventional accounting theory must be limited in the same way. The theory *follows* the practice in this instance, as we have seen.

Since industrial, noncapitalist societies and nonindustrial, capitalist societies would then be free to produce their own procedures for the measurement of wealth and profit, it would be appropriate to adduce some more general accounting theory which would encompass them all.

THE ASSUMPTION OF THE TRANSFERABILITY OF WEALTH

The second assumption of Western accounting theory is that the whole of the relevant economic activity of the enterprise is comprised in a listing of its cash and credit transactions. This in turn assumes that all economic welfare and benefits are in fact transferable; indeed this is probably the heart of the difference between the capitalist system and what existed previously. Previously, contracts were personal to the parties who originally contracted them; services, for example, were due to the lord of the manor and could only be transferred with the lord, which also required the permission of the overlord. Similar formalities governed other contracts.

This assumption of transferability is central to the idea of proprietorship and hence to capitalistic accounting. It enables one to set as a general aim the maximization of the present value of future income streams. This would not be feasible if the streams were not freely transferable because without current income a man could starve to death. The existence of a stock exchange, however, means that future income can be converted into spot cash, in theory, at any time. Moreover, proprietorship is, of course, essential to the basic equation of conventional accounting theory:

$$\text{Assets} - \text{Liabilities} = \text{Proprietorship}$$

In a privately circulated essay, W. F. Kissack suggests that this gearing of its economic activity to the concept of ownership is the special feature of the capitalist system. Moreover, this differs from all other forms of purposeful human activity (such as science, art, or even war) because its execution is governed by a legal convention, rather than by logic, aesthetics, or even pragmatism! Kissack goes on to stress that the object of economic activity is to increase welfare rather than to create claims in cash for a proprietorship. He uses this illustration: The objec-

tive of a soldier should be to win a battle and not to win a medal; the victory is the goal, but the medal is the reward.

Now it is not quite true to say that all welfare is transferable and hence salable. In a Western capitalist society, however, it may be substantially true, at least to the extent that one *could* conduct his business and private affairs on a transferable basis and leave the nontransferable aspect of his own welfare and his employees' welfare to the public sector. On the other hand, this approach will mean that any plans made are likely to be suboptimal and perhaps even strictly infeasible because incorrect objectives and incorrect data will be used. Quite apart from consideration of the welfare of other collaborators in the enterprise, even the decision-maker will find he has not achieved that which he might have hoped. For example, health and security are necessary for the enjoyment of material prosperity. A millionaire who is always panic-stricken concerning atmospheric pollution, robbery, and murder, is truly poor. The odd thing is that pollution and downtown ghettoes are not the product of general laissez-faire, but rather the outcome of activities for which many men planned and worked hard.

THE CONCEPT OF CULTURAL INCOME

The problem is more *acute* in a developing country because a higher proportion of the total welfare of the populace shares this nontransferable welfare. It has been reported that a nomadic tribesman might support life adequately, if not exactly luxuriously, on an annual income of about £60, however generously one cared to value the tangible items such as food and clothing which he manages to extract from his environment. Many nomadic tribesmen could be moved into a city; the national income would no doubt be doubled or trebled, but the nomadic tribesmen would surely starve. Clearly, all races and nations extract substantial benefit from what one might call their culture; especially in a poor country, these cultural benefits are as important and desirable as any others, and all management and planning should consider these factors.

A similar problem can be observed in developed countries in their agricultural sectors. A three hundred-acre farm in England can easily represent an investment of £100,000, while producing a transferable annual income of no more than £3,000–4,000 for its proprietor and very low wages for its employees. Nevertheless, a farmer with three hundred acres or arable land is likely to be a more influential person than anyone earning £3,000–4,000 in an industrial enterprise, even if he owned a noninterest bearing investment of £100,000.

One problem is how these externalities should be measured; an even greater difficulty is to decide how any measurement can or ought to be reflected in the accounts and planning exercises of an enterprise. The latter aspect of the problem is simply a particular application of the discussion of the economics of interdivisional transfer pricing. The most significant point of interest here, however, is that these cultural benefits are not capable of private ownership and, thus, not capable of transfer nor amenable to any net present value (NPV) treatment. They can only be enjoyed, pro rata, by the members of the culture at the time when they arise. This restriction upon NPV is general, so the use of this technique always assumes a state of perfect competition — where there are enough goods and services available to be bought for spot cash.

To the extent that affluence means having purchasing power to spare after the provision of necessities, it is apparent that affluence must imply freedom to exercise rather idle choices. The citizen of a developed country will make decisions whether to buy a dishwasher or a deep-freezer on quite different principles from a peasant deciding whether to buy a new plough or more corn seed. Thus the fact that a developed country is also a collectivist society does not by itself make the proportion of transferable welfare to cultural welfare different from that in a similar capitalistic society.

On the other hand, in a collectivist state the distinction between the industrial sector and the public sector of the national economy is not a distinction between private ownership and the public domain. It seems quite irrational for the activities of a state-owned enterprise to be planned so as to bring about diseconomies in other areas of state activity. And yet the growing affluence of some collectivist societies has meant that centrally directed and detailed planning can no longer provide for the satisfaction of the idle whims of an affluent society. This may be the mainspring behind the introduction of the economic reforms in the Soviet Union and elsewhere.

PLANNING AND CULTURAL WEALTH

Once accounting in these countries ceases to be used as a control system, the enterprises begin using their accounts in the same way as their capitalist counterparts. This produces similar conflicts in externalities which are more obvious in a collectivist society than in the West. As a result, we may expect Communist-bloc countries to concern themselves with accounting theory to an increasing extent and to become critical of its emphasis on exclusively transferable wealth.

The need to include nontransferable welfare consideration in microeconomic planning exercises, however, is not likely to be confined to developing or collectivist societies. The appetite for affluence grows as it is fed, and even now the people of developed countries are showing dissatisfaction with what is probably the acme of material prosperity; they wish to have their externalities optimized as well. Unfortunately, as the Soviet Union has discovered, imperative planning only works in practice in a subsistence economy, which means that in an affluent society the plan must originate at the enterprise level, even if it is later coordinated in some way at the national level.

How can this be achieved? The similarity of this problem to that of the divisionalized firm has been noted previously. Whinston suggests that such a firm might consider externalities by ad hoc ground rules which would prevent divisional managers from striking bargains which were contrary to the overall interest.[9] In a sense the law and para-legal regulations, such as Industrial Development Certificates, Selective Employment Tax, and development grants, are attempts to introduce ground rules of this type into the planning of enterprises. Even if these regulations, properly observed, produce plans which maximize citizens' welfare, they are likely to prove less than successful in practice.

Because the enterprise is still using its original (and incorrect) figures of income and expenditure, the governmental regulations are in no way seen as necessary amendments to the planning procedure. Instead, they appear to be interferences in the most profitable operation of the enterprise, and considerable ingenuity is commonly devoted to circumventing them so as to approximate the original, unregulated plan. It would be preferable if the true figures could be included in the original plan, at least to the extent that the adverse or beneficial effects of the enterprises' activities arise within the enterprise. True externalities can only be reflected by some sort of decomposition exercise which would again involve the creation of apparently arbitrary charges within the enterprise.

The evaluation of the cultural effects of various activities is a complex matter; to some extent these are considered in investigations of cost benefits analysis. For the moment, let us assume that this problem has been solved and consider how the resulting values might be incorporated in the enterprises' decision-making procedures. It would be necessary to

[9] A. Whinston, "Price Guides in Decentralised Organisàtions," *New Perspectives in Organisation Research,* W. W. Cooper, H. J. Leavitt, and M. W. Shelley II, eds. (New York: Wiley, 1964).

create a sort of "invisible welfare" account which would operate on the same lines as the cash accounts.

A number of rules could be listed which follow naturally on what has been said previously:

1. Any net surplus on this account cannot be *taxable* because it is not transferable. The nomadic tribesman or the farmer referred to earlier might be in the surtax bracket, but unfortunately they could only pay that tax from their meager *transferable* income.
2. The surplus cannot be *accumulated* but must be disposed as it arrives.
3. It is not possible, therefore, to apply a DCF approach to cultural benefits since the present value of future benefits cannot be sold.
4. Cultural benefits can be enjoyed by communities of participants and hence by individual participants in a "joint and several" fashion. They cannot be enjoyed by legal entities or by those whose contact with the community is solely through the ownership of rights to transferable wealth. I cannot obtain any benefit directly from the Nigerian cultures by owning shares in Unilever. My shares in Unilever, however, would not be unaffected by the existence of the Nigerian cultures. The density or sparsity of these cultures might make Nigerians less or more concerned about the size of the share of the transferable added value arising in Unilever's activities which went to shareholders overseas. At the same time, the Nigerians' cultural wealth or poverty might make them more or less disposed to concern themselves with Unilever at all.

THE INTERFACE OF CULTURAL WEALTH AND TRANSFERABLE WEALTH

In short, the cultural income and expenditure system is quite distinct from transferable income and expenditure. It might seem appropriate to say: "Business is business; the culture can look after itself, and our job is to maximize the transferable income." This cannot be true, however, if there is some interface between the two systems. There is some evidence that this interface exists. The behavioral theory of the firm tells us that businessmen do not seek to maximize their transferable profits but pursue other objectives. And yet the objective of profit maximization would be a logical one to choose if transferable wealth was all that one could desire. Instead, we are told, they work toward expanding market penetration and ensuring pleasant relationships with subordinates and other objectives which all amount to an admission that cultural enrichment (in the broadest sense) can compensate for losses of transferable earnings.

Several points in the structure of an enterprise where the interface operates may be noted. In a forthcoming book,[10] the author suggests that every manufacturing cost consists of a technologically necessary core called the rack-cost plus a changeable element which is identified as the organizational slack, which figures so largely in the exposition of the behavioral theory of the firm. The thesis of that part of the book is that the budget-setting operation within the enterprise is in fact a bargaining session between the plant supervisors (and other subordinates) with the budget controller over the allocation of the organizational slack.

Following the analysis of Fouraker and Siegel,[11] this negotiation will normally maintain the status quo ante, except to the extent that this is disturbed by an element which I call ψ. In the book, the nature of ψ is not too closely defined. In part, it represents feedback from past experience and, in part, the psychological changes which are seen to occur within the enterprise. One may reasonably suggest that cultural enrichment or improverishment may affect this bargaining and, thus, the transferable costs themselves. The bargaining is described in the work as a type of trade-off between industrial discipline and money wages, which seems to fit in well enough with the suggestion given in this paper.

THE PRACTICAL APPLICATION OF THIS ANALYSIS

To the extent that one accepts the notion of negotiated budget, it seems reasonable to examine the forces which may have an influence on the course of the negotiations. The degree of cultural enrichment, in a broad sense, may have a profound affect upon the trade-off of industrial discipline and transferable wage-income; thus, the behavior of money costs is affected by the surrounding cultural level.

The greater importance of nontransferable welfare to developing societies has been mentioned, and it was also suggested that increasing expectations of wealth may mean that the citizens of developed countries will demand more for this source. Another problem, however, faces the developed country; many of its citizens are so technically unskilled that they cannot make a contribution to the transferable income of the nation which is equivalent to the minimum (poverty line) standard of acceptable consumption. When these citizens form a social class, or

[10] Trevor E. Gambling, "Modern Accounting: Accounting as the Information System of Technological Change," to appear in Topics in Operational Research Series (London: Pitmans, n.d.).

[11] L. E. Fouraker and S. Siegal, *Bargaining Behavior* (New York: McGraw-Hill, 1963).

worse still an ethnic group, the social problems become acute because in a democratic and affluent society the implication is that anyone can improve himself; a failure to do so is regarded as proceeding either from personal unworthiness *or* some injustice in society itself.

Possibly (although the author does not guarantee it) an investigation of the sources and distribution of cultural wealth might make it easier to understand and even to remedy this problem. The "Protestant Ethic" relates only to transferable wealth!

Something should perhaps have been said of the very considerable literature which has discussed the futility of international and intertemporal comparisons of income. In general, these writers have suggested that in some way £10 has a different meaning to the tribesman and the Western city dweller; subject only to variations in the marginal utility of money, relative to the size of *total* income, the writer finds this line of argument unconvincing. The proposition of the existence of a quite distinct system of nontransferable cultural wealth seems to explain most of the difficulties of cross-cultural income comparison.

The French Accounting Experiment

KENNETH S. MOST*

France presents us with a well-documented example of the use of accounting for economic development. As with any social experiment, it is impossible to associate cause and effect so as to support a conclusion that the French accounting experiment contributed to the economic recovery of that country after World War II; we can only point to the fact that there has been, and still is, a widely held belief on the part of competent French officials that accounting does have a significant part to play in the economic development of the modern state.

The French economy had been devastated by that war, and its first post-war government, faced with the task of stimulating a rapid recovery to something like the pre-war level of social output, decided on measures aimed at creating a strong accounting profession. It may be asked why, in a country versed in the arts, sciences, and technology, whose people had made notable contributions to accounting theory and practice during the nineteenth century, it was necessary for government intervention for this purpose. The answer to this question is to be found in the observation that, by the 1930s, accounting had become dominated by the law. Not only was the French accountant engaged largely in satisfying the requirements of the country's company and tax laws, but his professional activities were as closely regulated as those of the other

* Kenneth S. Most is Professor and Head of the Department of Accounting at Texas A & M University. He has a Ph.D. in Economics from the University of Florida and is both a Certified Public Accountant (Texas) and a Chartered Accountant (England and Wales). Dr. Most has published extensively on a wide variety of accounting research. The author expresses his appreciation for assistance and provision of source materials to Monsieur P. Lauzel, lately Vice-President of the *Conseil National de la Comptabilité* of the French Ministry of Finance and Economic Affairs.

professions in France, and accounting was taught in law schools rather than in faculties of economics or business administration.

The civil servants to whom was entrusted the postwar reconstruction appear to have appreciated the need to use accountants for planning and control, rather than for the passive description of juridical observations. They introduced special legislation in order to create an organ of state which would be an alternative source of influence over the accounting profession. The aim of this agency was to foster the study of relationships between the firm and its environment, and between the various disciplines which contribute techniques to the management of investment and production, and which use accounts as an analytical method.

I. HISTORY AND ORGANIZATION

The French commercial code and the company laws of 1867 were the principal sources of accounting regulations prior to World War II. In 1945, the Ministry of Finances and Economic Affairs set up a Committee for the Rationalization of Accounting, whose task was to propose a national uniform system of accounts and to make recommendations for its application and utilization for the benefit of the national economy. The first national chart of accounts, or *Plan comptable général* appeared in 1947,[1] and in the same year the committee was replaced by the *Conseil Supérieure de la Comptabilité,* charged with supervising the introduction of the *Plan.* In 1957 the name of this body was changed to *Conseil National de la Comptabilité.* The chart was to be applied in all state agencies of an industrial or commercial type, of which nationalization had created a good number, and in "mixed" enterprises, those firms in which both public and private interests participated. The chart was accompanied by a model balance sheet and profit and loss account, together with detailed instructions for the operation of the accounting system and the preparation of period financial statements.

The *Plan* of 1947 appeared at a time when *dirigisme,* or direction from above, was the dominant influence on French politics, and its authors envisaged the eventual compulsory application of the national chart of accounts to all public and private enterprises in France. A series of ministerial orders applied the chart, with modifications of detail in each case, to government agencies, public enterprises, and firms oper-

[1] Decree No. 47-2051 dated October 22, 1947. See Bernard M. Berry, "Uniform Accounting in France: *Le Plan Comptable,*" London, *The Accountant* (February 26, 1949, and March 5, 1949).

Figure 1. French National Chart of Accounts*

Financial Accounts								Cost Accounts	Special Accounts
Balance Sheet Accounts					*Profit and Loss Accounts*		*Results Accounts*	*Cost Accounts*	
Class 1 Permanent Capital	*Class 2 Fixed Assets*	*Class 3 Inventories*	*Class 4 Personal Accounts*	*Class 5 Liquid Accounts*	*Class 6 Expenses by Type*	*Class 7 Revenues by Type*	*Class 8 Results*	*Class 9 Costs*	*Class 0 Special*
10. Capital	20. Formation expenses	30. Goods	40. Suppliers	50. Loans payable (less than one year)	60. Purchases	70. Sales of goods and finished products	80. Trading account	90. Reciprocal accounts	00. Contingent liabilities
11. Reserves	21. Fixed assets	31. Raw materials	41. Customers	51. Loans receivable (less than one year)	61. Personnel	71. Government subventions for operating expenses	81. . . .	91. Cost	
12. Profit and loss account balance	22. . . .	32. Consumable supplies	42. Personnel	52. Bills and warrants payable	62. Taxes	72. Sales of scrap, etc.	82. . . .	92. centres, and so on	
13. . . .	23. Fixed assets in construction (or in course of acquisition)	33. Scrap and defective work	43. State	53. Bills and warrants receivable	63. Services and supplies	73. Selling price reductions	83. . . .	93. Products, cost of sales	
14. Government subventions for equipment	24. Fixed assets destroyed by war	34. Semifinished goods	44. Partners	54. Checks and coupons to be cashed	64. Transportation and travel	74. Rebates, reductions and allowances received	84. . . .	94. Permanent inventory	
15. Provisions	25. Loans receivable (more than one year)	35. Finished products	45. Branches, subsidiaries, holding company or head office	55. Stocks and shares, treasury bonds	65. . . .	75. . . .	85. . . .	95. . . .	
16. Loans payable (more than one year)	26. Stocks and bonds	36. Work in process	46. Sundry debtors and creditors	56. Banks and postal checking accounts	66. Miscellaneous	76. By-products	86. Exchange of products and services without charge	96. Standard cost variances	
17. Branches, subsidiaries	27. Guarantee deposits	37. Packing materials	47. Accruals-liabilities	57. Cash	67. Financial	77. Financial revenues	87. Profit and loss account	97. Differences between costs charged and actual	
18. . . .	28. . . .	38. . . .	48. Accruals-assets	58. Imprest funds and other advances to be accounted for	68. Depreciation and provisions	78. Products manufactured for own use; expenses applicable to other periods	88. Results in suspense	98. Cost operating statements	
19. . . .	29. . . .	39. . . .	49. Transitory accounts	59. Internal transfers	69. . . .	79. . . .	89. Balance sheet	99. Internal transfers	

* Author's translation of *Plan Comptable Général* (1957).

ating with state backing, or subject to state control. The last situation could arise through the acknowledged interest of a broad section of the population (for example, the agricultural cooperatives), or because the firms in question had received substantial fiscal benefits through revaluation of assets. After ten years' experience with the chart it was found advisable to make its application voluntary in most of the private sector, and a revised version of the *Plan* was introduced by ministerial order dated May 11, 1957.[2] This is a volume of some 250 pages, including a detailed chart of accounts supporting the summary chart reproduced in translation on a page together with a series of model financial and statistical reports. It also contains the texts of the ministerial orders mentioned above, a manual of operating instructions, some definitions of technical terms, and a variety of ideas on financial and accounting problems. A second revision is in progress at the time of writing this study.

The *Conseil,* which is responsible for these initiatives, has been assigned the following goals:

1. Coordination and synthesis of theoretical and technical research in accounting, together with practical applications.
2. In cooperation with other interested parties:
   (a) to centralize knowledge, initiate studies and disseminate information on the teaching of accounting in schools and colleges;
   (b) to advise on accounting regulations or recommendations before any promulgations by government agencies, public commissions, or committees controlled directly or indirectly by the State;
   (c) to propose any measures relating to the rational use of accounts by firms, or in the form of public budgets and social accounts.
3. Development and adaptation of the *Plan comptable général.*[3]

The inter-disciplinary character of the *Conseil* has been purposely achieved in order to combine representatives from the law, economics, business administration, statistics, scientific management, and the accounting profession for the attainment of these objectives. The president of the *Conseil* is a senior civil servant, and there are five vice-presidents representing, respectively, the ministry, government accounting, the leading professional institute of accountants (*l'Ordre des experts-comptables et comptables agréés*), business firms, and higher education. In addition, the *Conseil* comprises representatives of those institutions which have

---

[2] *Plan Comptable Général,* Paris, Imprimerie Nationale (1957).

[3] *Premier Rapport Sur l'Application Progressive du Plan Comptable Général* (Paris: Ministry of Finances and Economic Affairs, July 1, 1963).

accounting as their objective (schools of accountancy, publishers of accounting and ancillary works, auditors of public enterprises), other accountancy societies, organizations of chief accountants and industrial engineers, trade unions and employers' associations, together with civil servants selected because of their accounting experience and other persons chosen for their knowledge of the law, economics, and finance.

The *Conseil* meets in plenary session to define its policies and to prepare its program. The detailed work is delegated to *sections,* whose activities are coordinated by an administrative department under seven *rapporteurs* (discussants). The sections cover:

Section 1. Documentation, public relations, dissemination of information; studies relating to the professional education of accountants, and courses in schools and colleges; general problems arising out of the application of the *Plan*;
Section 2. Principles and techniques of financial accounting; rules for drawing up a balance sheet, profit and loss account, and appropriation account, particularly in relation to public enterprises and "mixed" firms, where the procedures are complicated by legal considerations;
Section 3. Managerial and cost accounting;
Section 4. Agricultural accounting, including agricultural cooperatives;
Section 5. Government accounting and accounting for government agencies;
Section 6. Social accounting and relations between business, government, and social accounts;
Section 7. Efficient accounting methods, budgeting and business planning, statistics for management, accounting equipment.

II. THE PERIOD 1947–62

A decree of 1962 (No. 62-170) revised the conditions under which the application of the *Plan* was to proceed, and called for progress reports, the first of which was published in 1963.[4] The report noted that the *Plan* had been adopted by virtually all public enterprises (coal, electricity, gas, air and rail transportation, and so on) and by a large proportion of the "mixed" firms. While it was more difficult to draw firm conclusions concerning its application in the private sector, progress was satisfactory for a number of reasons:

1. Fiscal laws had favored the adoption of the plan;

[4] Ibid.

2. Teachers had taught the form and contents of the *Plan* to many who were now practicing accountants; and
3. The intrinsic qualities of the *Plan* had recommended it to many firms as both practical and convenient.

The benefits which flowed from the adoption of the *Plan* were given as: an established terminology which eliminated ambiguities, precise and logical rules for classification and analysis, principles aiding the determination of values, a common language facilitating communication between the manager and the accountant. These benefits were largely restricted to the area of financial accounting, and experience had revealed the need for substantial research on an industry basis in order to establish norms in the area of cost accounting. This was one of the reasons underlying the 1957 revision, which had replaced the obligatory cost accounting provisions of the 1947 *Plan* with more flexible rules which gave firms virtually complete freedom in this area.

The new *Plan* modified the previous one by suppressing all regulations which called for sanctions in the event of noncompliance, and replacing instructions by recommendations throughout. It also laid down the rule that all parts of the *Plan* dealing with bookkeeping methods and records were to be regarded as recommendations for financial accounting only; even those undertakings which were under statutory obligation to apply the chart were granted virtually complete freedom as to the form and content of their cost accounts.

This change in policy is all the more remarkable when it is recalled that one of the factors which led to the introduction of the original *Plan* was widespread tax evasion through the falsification of accounts. The explanation lies not only in the swing to the right which French politics experienced during this period, but also in the great measure of support which the first *Plan* received from commerce and industry, and its wide voluntary acceptance. For example, over 45,000 copies of the first *Plan* were sold to the public, and also large numbers of text-books by individual writers which undertook its exposition.[5] Nevertheless, it was acknowledged that "a minimum of accounting discipline may be imposed where businesses call for financial aid from the State, or tender for its business."[6]

It is also interesting to note the disappearance of the phrase "gross

[5] Kenneth S. Most, "Uniform Accounting in France," *The Accountant* (November 23, 1957):594–6.
[6] Translated by the author from *Plan comptable général,* p. 9.

profit" from the model profit and loss account. The authors of the *Plan* stated:

Many accounting practitioners will doubtless regret that the account does not reveal a gross profit. This point has been the subject of great argument. It has appeared that opinions differ seriously concerning the meaning of this expression, and that it would not be possible to use the gross profit as a basis for calculating "break-even" points unless all so-called "variable" expenses were deducted from sales, irrespective of their type or function (purchasing, production, distribution, administration)."[7]

III. PROGRESS SINCE 1962

A major result of the 1962 decree was the establishment of professional committees for industries, with the objective of producing uniform accounting systems compatible with the *Plan* for each industrial grouping. Such systems would, it was expected, lead to the adoption of charts of accounts which, while basically homogeneous with the *Plan,* could reflect the particular features of the industry concerned; at the same time, solutions adopted by one industry to problems experienced also by others would be analogous and consistent. Thus, for example, the definition of "purchases" in one industry should correspond with the definition of "sales" in the industry from which they are bought.

Guide-lines were prepared for these committees by a special subcommittee of the *Conseil,* composed of the *rapporteurs des sections* and representatives of the employers' associations and government agencies involved, together with professional accountants. First priority was given to propositions concerning financial accounting, but in the light of the significance of the cost accounts for certain elements of the financial accounts, the study of cost accounting should be undertaken before the completion of work on financial accounting. For its studies of financial accounting, the professional committee should be constituted on the widest possible basis, because of the influence of size on the problems posed by this area. The study of cost accounting problems should be delegated to persons familiar with managerial uses of accounting information, and this work would be coordinated by the professional committee, and not by the *Conseil.* Finally, the taxonomic problem was resolved pragmatically: the optimum level in the pyramid of industrial structures should be the highest level at which uniform accounting could be achieved rapidly. All attempts to classify a priori were there-

[7] Ibid., p. 13.

fore abandoned in advance, and replaced by a preliminary study of the possibilities of the situation.[8]

An initiative tending to inform accountants and industrial organizations of the plans being laid was the circulation of a paper outlining the objectives of the *Conseil* and of the measures being taken to constitute professional committees. It was known that some work was already being done in a few industries at different levels, so that it was decided to establish contact with them as representative industries: metal-working, heavy electrical, textiles, chemicals. By July 1963 the following classification had been adopted, and most of these industries had submitted adaptations of the *Plan* for approval by 1966 at the latest.

Power (coal, electricity, gas, atomic enegery, certain domestic oil companies). It was found advisable to set up separate professional committees for oil research and exploration (production of hydrocarbons) and for refining and distributing.

Building construction. It was found advisable to set up separate committees for public works and other building construction, the latter to pay particular attention to the needs of small firms of craftsmen. In the event, a joint *Plan* was adopted.

Building materials. Because of the complexity of this industry, no progress was reported through 1965.[9]

Metal-working. The close ties between the metallurgical, mechanical, and electrical industries rendered the task of classification complicated.

(a) Iron and steel — the committee's work was delayed by problems in valuing fixed assets

(b) Mechanical and metal-working

  (i) First transformation of steel, and iron-founding

  (ii) Nonferrous metals (except for bauxite, the bulk of these are imported)

  (iii) Fabrication

  (iv) Automobiles and cycles

  (v) Other mechanical and metal-working

(c) Electrical — heavy electrical and electronics

Chemicals.

Textiles. A basic problem arose through the fact that the historic

---

[8] See Mary Parker Follett.

[9] *Deuxième et Troisième Rapports Sur l'Application Progressive du Plan Comptable Général* (Paris, Ministry of Finances and Economic Affairs: 1965).

organization of the industry is on the basis of the materials used, whereas technology is now of prime importance. It would have been preferable to classify the industry into spinning, weaving, knitting and so on, but in the event it was decided to form two committees, one for those industries which start with the raw material, and one for those which transform the products of the first. These also produced a joint *Plan.*

Printing and graphic arts.

Wood-working.

Leather and furs. Separate *Plans* adopted for tanneries and for shoemakers.

Transportation. No initiatives were reported in respect of maritime transport, although two of the largest French firms had adopted the *Plan* in its original form. Difficulties were experienced with inland water transportation, which was operated largely by the public sector. Road transportation was likewise difficult to organize.

Banks and insurance. These were already subject to legal regulations prescribing the form and content of their accounts, which antedated the first *Plan,* and it is ironic that the greatest obstacles in the way of the adoption of the *Plan* lay in the fields of credit and finance.

Food. The retail butchers were among the first to adapt the *Plan* for their use. Other branches were: wholesale grocery, perishable foodstuffs, multiple retail stores.

Adaptations were foreseen for the clothing, pharamaceutical, paper and boxmaking and furniture industries, and proposals were under consideration for agriculture, forestry, various branches of food manufacture, ship and aircraft manufacture, defense contractors, rubber goods, rental housing and apartments, hospitals, and a variety of other trades and industries.[10]

IV. THE PSYCHOLOGICAL AND TECHNICAL PROBLEMS

A. Psychological Problems

Although in general favorable, reactions to the work of the *Conseil* have been unfavorably influenced by certain factors, notably fear of the way in which government might make use of information obtained as a result of the work of the professional committees. Fear of fiscal consequences is the most commonly expressed, in particular, of the possible outcome of a situation in which the tax laws and the prescriptions of the *Plan* conflict. For its part, the *Conseil* has expressed to the minister the

[10] Ibid.

view that no fiscal regulation should affect either the terminology and rules of the *Plan* or the normal methods of keeping accounts, and, whatever the advantages of fiscal measures implying a divergence between the tax laws and accounting norms, these advantages should be obtained in the form of measures affecting assessment to tax and not in the form of modifications of the process of profit determination.

Representatives of those industries to which government is an important customer also experienced some hesitancy in providing information which might be useful for the regulation of their markets, particularly when the committees proceeded to discuss cost accounting. They required knowing in advance what rights the ministry would acquire for investigating their cost accounts during the course of negotiations, in contract determination, and in postaudit. The *Conseil* was only able to assure the parties that its interventions were designed to facilitate the resolution of disputes which might arise from problems of accounting, a frequent occurrence in this area. It is obvious that the regulation of such markets would be greatly helped by uniform cost accounting, as recent developments in the United States bear witness,[11] but it is equally clear that, in order to pursue its objectives of improving the quality and flow of accounting information generally, the ministry would seek to avoid conflict by relying on the findings of the professional committee. A difficulty might arise through a government agency laying down definitions and rules before the relevant adaption of the *Plan* appeared, so that it would be advisable to promulgate such regulations as temporary guidelines pending the completion of the professional committee's work.

Another fear, more rarely expressed but frequently manifested in one form or another, was that the extension of the *Plan* to all trades and industries would lead to a degree of uniformity rendering the *Plan* difficult to apply in particular firms (the "my firm is different" syndrome). The danger foreseen is that the inflexibility of a uniform system would impede the development of accounting as a managerial information system. The form which this fear might take was the attempt to set up a professional committee within an industry or branch, where no technical reason was apparent. Again, it might lead to the desire to remake the *Plan comptable général,* that is, to reopen issues concerning definitions, principles, and choice between alternatives. Both of these manifestations of insecurity required tactful handling; the former in the

[11] See Comptroller General of the United States, *Feasibility of Applying Uniform Cost Accounting Standards to Negotiated Defense Contracts* (Washington, D.C.: Government Accounting Office, January 19, 1970).

professional committees themselves, and the latter by the *Conseil,* which was able to point to its efforts to collect the observations and suggestions made in these circumstances with a view to the periodic revision of the *Plan.*

The reticences displayed by members of the committees as a consequence of these fears were supplemented by a "wait and see" attitude; disappointment of those who believed that the adaptation of the *Plan* was a simple technical problem, only to discover its concealed difficulties of definition and interpretation; misunderstanding of the nature and potentialities of cost accounting in particular, and managerial accounting in general. It is apparent from the two reports cited that the French experiment did not benefit from any special advantages in the field of human relations, other than a willingness on the part of the officials concerned to face important psychological problems, and to overcome them.

B. Technical Problems

We have already drawn attention to two technical problems faced in this experiment: the identification of an industrial classification under which professional committees could be formed, and the ascertainment of those particular features — whether structure or size — of a trade or industry having effects upon the accounts themselves. In respect to the former, experience has confirmed the wisdom of the decision taken, and considerable assistance was obtained from other government agencies engaged in regulation in carrying out the necessary research. Indeed, the reports of the *Conseil* emphasize the importance of this taxonomic function in arriving at the formation of committees which do not contain elements capable of obstructing the work of adapting the *Plan* because of their essential heterogeneity. Nevertheless, it is noteworthy that although only a small number of industries were subject to this danger, the risk was regarded as too great to be taken.

The work of the committees revealed that in many cases the search for a solution of a recognized accounting problem led to the discovery of other problems which had remained hidden or incapable of clear statement. These problems may be divided into two classes: problems of general interest, and problems specific to the industry. Among the former, it is necessary to decide as and when they arise whether they require immediate solution, or whether a solution has to be deferred until the *Plan* can be reconsidered as a whole. Among the latter are many which present themselves in a similar fashion in other industries,

so that the degree of specificness of the problem becomes an issue; the representatives of the *Conseil* have the task of seeing that exceptions remain exceptional.

One example of this situation may be cited. Technological change causes firms to acquire equipment and installations at a high degree of specialization, and a question sometimes arises concerning their conformity to one of the "fixed asset" classifications without qualification, i.e., under which of the headings of the *Plan* should they be included? In the case of oil production it was decided to open two new accounts specially defined for the particular case, viz: 213 Specialized installations, and 217 Long distance pipelines.

Subsequently, analogous situations arose in other industries, which showed that the account for specialized installations could be used in a variety of adaptations of the *Plan;* even the pipeline account proved useful for equipment which, while not identical, was sufficiently similar to be classified under this account number.

The existence of "free accounts," corresponding to matrix cells containing zeros, permits a considerable degree of variation within the *Plan,* and, as long as these are not preempted by the *Plan comptable général,* they can be used for purposes specific to the industry, even though other industries are using them in quite different subclassifications within the main class. The use of these "free accounts" appears to be one of the points at which pressure on the *Conseil* builds up.

The existence of firms occupying more than one industrial classification, called "polyvalent," raises the problem of compatibility; there must be a high degree of uniformity between the *Plans* of the various industries even though the firm may opt to adopt any one of them. This situation concerns financial accounting rather than cost accounting, where the solution is facilitated if the activities in question are carried out in different establishments. Nevertheless, the financial accounting problem is acute where the same account has to be allocated to different purposes at the same time, and if the firm is big enough it may be necessary to consider it as a subject for a special secondary adaptation. Where the "polyvalences" present a certain regularity, as in the case of mechanical and electrical engineering, or chemicals and pharmaceuticals, the solution can be worked out in advance, but not where there is a time-lag in the completion of the work of the relevant professional committees. In the oil industry, for example, the production committee completed its work while the refinery committee was still sitting; liaison was effected by having a representative of "refining" on the

"production" committee, but the latter's choices must impose themselves to some extent on the former's deliberations. In view of this and the preceding problem, the *Conseil* sees additivity as restricted to the three-digit accounts, reducing to two digits for inventory and purchase accounts.

Accounting for research and development was considered at length by the oil production committee. While all such expenditures could have been charged to Account no. 22, the *Plan* laid down two restrictions: fictitious values in respect of research which is known to be abortive should not be shown as assets, and items previously treated as operating expenses should not subsequently be shown as sources of profit. The solution to this problem was originally envisaged in the form of a depreciation adjustment, which could amount to 100 percent of the amount capitalized, but opposition from accountants, based on a suspicion of potential abuses on the part of both managers and the tax authorities, led to a reconsideration of this issue which appears not to have arrived at a satisfactory conclusion.

No one will be surprised to learn that interest on capital presented another insoluble problem, particularly in the iron and steel industry, where this item assumes considerable importance. Should some of these costs be capitalized, either as fixed assets or as organization costs, and at what accounting cost, since the administrative work involved cannot be reduced to a simple formula? In spite of these apparent obstacles, we believe that the committees will eventually reach satisfactory conclusions on these delicate problems of valuation, because the model with which they are working is fundamentally sound.

V. Conclusion

This brief description of the French accounting experiment shows the application of an accounting model of the firm to a wide range of commercial and industrial activities in a manner tending to the elimination of those elegant variations and unnecessary proliferations which confuse the analyst and arouse the teacher's ire. The theoretical basis of this model, and its superiority to the economic, financial, and cybernetics models, form the subject of the author's doctoral dissertation.[12]

---

[12] Kenneth S. Most, *The Role of Accounting in the Economic Development of the Modern State* (Ph.D. diss., Florida, 1970).

The Impact of Environment on Accounting Practices: Germany in the Thirties

REIN ABEL*

INTRODUCTION

One of the periodically recurring themes in literature of international accounting is a lament over the difficulties faced by international investors and others that result from the existence of a myriad of national accounting practices.[1] The common cure generally prescribed for these ills is the introduction of a greater degree of uniformity among the various national accounting practices. Thus the distinguished Dutch accountant Jacob Kraayenhof has made a series of proposals that he hoped would lead to greater international uniformity of accounting principles and auditing practice.[2] His proposals were subsequently discussed at the eighth International Congress of Accountants in New York in 1962. Not surprisingly, the same topic was also discussed at the ninth Congress in Paris in 1967. Even less surprising was the recommended solution to the perceived difficulties: "harmonization of accounting principles." This solution was elaborated as follows:

* Dr. Rein Abel is an Assistant Professor of Accounting at the Wharton School of Finance and Commerce, University of Pennsylvania.

[1] The term "accounting practices" is used here in the sense defined in *Professional Accounting in Twenty-five Countries* (New York: American Institute of Certified Public Accountants, 1964), p. 22: "No attempt is made here to distinguish between principles, practices, and methods. The term 'practices' is generally used in include all three. It is also used with regard to presentation, classification and disclosure of items in financial statements."

[2] Jacob Kraayenhof, "International Challenges for Accounting," *Journal of Accountancy,* January 1960, pp. 34–38.

> The development of international relations and of enterprises with branches or subsidiaries in numerous countries requires the elaboration of principles and standards of international coverage which would freely be accepted by accountants.
> This unification should apply not only to accounting principles and standards, but also to the construction of accounting reports so that, in any one country, accounts prepared by foreign practitioners can be readily understood.[3]

As contrasted with this frequently voiced plea for greater uniformity, a different argument that tries to justify or explain international differences in accounting practices has begun to appear in literature more recently. Thus G. G. Mueller has stressed the importance of the relationship between accounting on the one hand and the business and economic environment on the other.[4] Another author, G. F. Beazley, argues that more emphasis should be placed on "cross cultural aspects of the operation of accountants in different environments." In particular he emphasizes that:

> By focusing on differences and similarities of this nature, research efforts should enable us to understand why people behave differently, and to understand that *different* is not necessarily synonymous with *inferior*. More important, perhaps, it should enable us to better understand the problems which arise in international accounting because of these cultural differences, and alert us to the ways in which these difficulties might be overcome.[5]

Thus it seems that at least some writers have begun to argue that progress in international accounting does not necessarily lie in the direction of greater uniformity in international accounting practice. Rather, the argument put forth seems to imply that there may be good and sound reasons why there should be at least some diversity in international accounting practices.

This paper is an attempt to give some support to the argument outlined in the preceding paragraph. To this end developments in Germany in the thirties will be described, and an attempt will be made to analyze the reasons behind these developments. At that time German accountants had developed their own brand of uniform accounting in response

[3] Quoted by T. K. Cowan, *The New Horizons of Accounting* (Paris: Ninth International Congress of Accountants, 1967), pp. 151–52.

[4] See, for instance, G. G. Mueller, "Accounting Principles Generally Accepted in the United States Versus Those Generally Accepted Elsewhere," *The International Journal of Accounting* 3 (Spring 1968): 91–103.

[5] Garnett F. Beazley, Jr., "An International Implication for Accounting," *The International Journal of Accounting Education and Research* 3 (Spring 1968): 7.

to the economic and political conditions then prevailing in the country.[6] The concepts behind this type of uniform accounting were quite different from those associated with the current American drive for greater uniformity in published financial statements.[7]

The essential argument put forth here is that there were good and valid reasons why the Germans at that time developed this particular system of uniform accounting. Furthermore, the success or failure of that system can be judged only if the social and economic framework within which it operated is taken into account. Any attempt to compare those early German developments with other ostensibly similar efforts, such as the current American drive for greater uniformity in financial statement presentation, would seem quite improper as long as the different objectives of the respective accounting processes and differences in the environment are not given adequate consideration.

In order to introduce the topic we shall first discuss the major differences between the German and American approaches to accounting uniformity. Then we shall turn to a brief review of the forces that were important in shaping the German system such as the historical development of industrial accounting in Germany and the economic philosophy of National Socialists. Next, the basic characteristics of the German system will be described. Finally, an attempt will be made to evaluate the German experiment in the concluding part of this paper.

MAJOR DIFFERENCES BETWEEN GERMAN AND AMERICAN APPROACHES TO ACCOUNTING UNIFORMITY

In discussions concerning accounting information the emphasis in the United States has tended to be on published financial statements and on the amount of information or misinformation they furnish outsiders. Historical reasons seem to account for much of this emphasis.

The general economic growth that began to gain momentum in this country in the middle of the nineteenth century took place in the heady atmosphere of classical liberalism. In England, Carlyle had described "anarchy plus a constable" as the goal toward which the English so-

[6] On the whole, not much has been written in English on the subject. However, for a good survey of the German experiment, see Hans W. Singer, *Standardized Accountancy in Germany,* Occasional Paper V., National Institute of Economic and Social Research (Cambridge, England: Cambridge University Press, 1944).

[7] For a more extended discussion of different approaches to accounting uniformity see Gerhard G. Mueller, "International Experience with Uniform Accounting," *Law and Contemporary Problems* 30 (Autumn 1965): pp. 850–73.

ciety should be moving. And to a considerable extent this intellectual English tradition with all of its built-in beliefs and prejudices was transplanted to the United States.

In this general atmosphere conducive to individualism, the promoter became an important middleman who tried to interest men with surplus capital in various investment projects. Once prospective investors began to judge investment opportunities on the basis of their prospective earnings, financial statements that included some kind of earnings figure became clearly a necessity for the efficient functioning of the whole system. We might add that a considerable amount of early development, particularly that of railroads, canals, and turnpikes, took the form of local promotion where local investors made their contributions primarily in order to secure the building of desired transportation facilities and the question of earnings on capital was regarded as a matter of secondary importance. As projects grew in size, however, the local investor was no longer in a position to supply all the necessary capital and thus the more distant investor had to be attracted.

Thus financial statements, including an earnings amount, submitted to third parties became an important factor in the capital allocation process of the American economy. Although the role of earnings or profits in this allocation process has been challenged at times in the Anglo-Saxon countries, to a large extent their crucial role in this area has been always recognized.[8] This concern with profits in published financial statements was not evident in Germany until the passage of the 1965 Corporation Law. Again historical developments seem to provide an explanation for this German attitude.

The influence of the classical economists was far more limited on the continent of Europe. In the principalities that were later to become Germany and in the Austrian empire the tradition of state intervention in economic affairs was accepted not only by practical men of the day, but also by successive schools of economists and by writers on statecraft. From the eighteenth century Cameralists to the early nineteenth century German Romantics to the Historical school of economics that flourished during the second half of that century, we have a succession

[8] For instance, Alfred Marshall, whose writings have considerable influence on the economic thought of the thirties had written "each [man] taking account of his own means will push the investment of capital in his business in each several direction until what appears in his judgment to the outer limit, or margin, of profitableness is reached. . . ." *Principles of Economics,* 8th ed. (London: Macmillan Co. Ltd., 1961), p. 296.

of theories through which runs a common thread of anti-individualism. The ideas of English classical economists, although they occasionally exerted some influence against these various doctrines, were never quite able to overcome them completely.

This ready acceptance of state intervention in economic affairs and the tradition of anti-individualism seem to have had two consequences relevant for our purposes. First, as demand for industrial capital increased during the second half of the nineteenth century, strong banks, rather than individuals organized by a promoter, emerged as suppliers of a significant portion of this capital. Consequently the practices of German banks began to differ markedly from those of their Anglo-Saxon counterparts:

> The great difference between the German and Anglo-Saxon banking systems becomes apparent in the difference in meaning of 'bank' in Germany and in England and America. The German bank, is a combination of commercial bank, investment bank and investment trust. . . .
>
> The bank or the group of banks would take over the stocks or bonds to be issued at a fixed price and then try to place them with the public. In consequence, the banks had substantial holdings of stocks and bonds of industrial and commercial companies permanently in their portfolios.[9]

As a result of this special role played by German banks, they tended to develop their own channels of information quite separate from the usual published reports. Thus, the banks established their own audit companies at the turn of the century and they apparently used their great financial powers quite effectively to extract any relevant information from company managements. This ability to obtain and to analyze relevant financial information appears to have enhanced considerably their reputation as astute investment advisers with the general public.

One of the consequences of this practice was that there were apparently no popular pressures to make published financial statements more meaningful until quite recently. In particular, a totally irrelevant net income figure was accepted in those statements.

This brings us to our second point, which is to consider what exactly has been the role of published financial statements in Germany; they quite clearly have been deficient as tools in the process of making investment decisions. Possibly due to the traditional German anti-individualism and the ready acceptance of state intervention in economic

---

[9] Gustav Stopler, *German Economy 1870–1940* (New York: Reynal and Hitchcock, 1940), pp. 44–45.

affairs, the central authorities have not hesitated to prescribe the form and content of published financial statements. The means used for this purpose has been the Corporation Law. Further, changes in Corporation Law have frequently followed some major economic upheaval that, in one way or another, has been associated with numerous business failures. In those depressing circumstances accusations of fraud and dishonesty are almost inevitable. And quite naturally the primary objective of government intervention in such an atmosphere has been the protection of creditors. One German author described this state of affairs:

> But legal requirements are completely dominated by preoccupation with the protection of creditors. Therefore in Balance Sheets only overvaluations, unlike undervaluations, are prohibited with the consequence that whoever prepares the statements can arbitrarily modify the profits figure.[10]

We noted previously that this almost exclusive preoccupation with creditors was somewhat changed in the 1965 Corporation Law. Yet, as the subsequent parts of this paper show, the earlier drive for accounting uniformity in Germany clearly was not really concerned with financial statement presentation.

Instead, the emphasis was on uniformity at the industry level and the objective was cost comparisons between similar enterprises. Even in the late thirties when attempts were made to develop a compulsory unified national system on the basis of these industry-wide plans, that original objective was still retained. Singer makes the following comment on the subject while discussing the changes that were taking place:

> The foremost purpose of the uniform costing rules is stated in the text of the *Uniform Costing Principles* in these words: "The ultimate great aim of the reform of accountancy is the mutual exchange of experience between those responsible for the conduct of affairs in all business undertakings belonging to one industry. This cannot be achieved without a uniform system of cost accounting." Consequently it is the immediate objective of the *Uniform Costing Principles* and the *Directives for Cost Accounting* to secure absolute comparability between firms and a comparative analysis of costs on that basis.[11]

Therefore, it seems justifiable to conclude that in Germany the drive for uniformity centered principally on industrywide cost accounting plans rather than on financial statement presentation which has been

[10] Translated by the author from Kurt Merker, Kenneth S. Most, Jurgen Koester, *Moeglichkeiten und Grenzen internationaler Bilanzvergleiche* (Berline: Deutsche Gesellschaft Fuer Betriebswirtschaft, 1965), p. 62.
[11] Singer, *Standardized Accountancy,* op. cit., p. 46.

the primary concern of American accountants. These differences between the German and American approaches to accounting uniformity should be remembered in evaluating the historical developments in Germany, our next topic.

THE EARLY DEVELOPMENTS IN GERMAN INDUSTRIAL ACCOUNTING

German industry really began to develop only in the last quarter of the nineteenth century after the establishment of the German Empire in 1871 and more particularly after the country turned towards protectionism in 1879. Industrialization was accompanied by a rapid growth of trade associations. These associations, in turn, joined to form central organizations. The first of these central bodies, the *Zentralverband Deutscher Industrieller,* was established in 1875 for trade associations active in the heavy industry. Another central association, the *Bund der Industriellen,* followed in 1895. The latter body became the central organ for trade associations in the light manufacturing industry. The two central associations merged in 1919 to form the *Reichsverband der Deutschen Industrie.*

Traditionally these associations have acted as originators as well as clearing houses for ideas in the field of industrial accounting. Therefore, the emergence of trade associations seems to have had some bearing on the development of industrial accounting in Germany. The nature of this interindustry collaboration is described by one author as follows:

> In the majority of German industries there has long existed a close collaboration in the field of accounting. The original purpose of this collaboration was mutual assistance and better understanding between members of the same industry. It has gradually developed into a comprehensive technical advice system, whereby each accountant working in a particular trade or industry can call upon the combined experience of his fellows.[12]

Formalized study of business economics (*Betriebswirtschaftslehre* — a field of study that encompasses industrial accounting) also began in Germany at the turn of the century.

As these two groups, academic accountants and trade associations, became active in accounting research, they soon turned their attention to charts of accounts. The development of these charts were regarded as the primary contemporary industrial accounting problem. One author distinguishes between three periods associated with different types

[12] Kenneth S. Most, "Classification and Coding," *The Accountant* 134 (January 26, 1957): 87.

of charts: (a) charts that arose from practice; (b) charts influenced by Schmalenbach; (c) mandatory charts.[13]

The first comprehensive chart of accounts was apparently published by Johann F. Schaer in 1911.[14] At that time, however, the "spirit of individual economic achievement" was too strong to allow serious consideration of a uniform system of accounts based on a single basic chart covering the whole economy.[15] However, World War I evidently wrought changes in this individualistic atmosphere. As cost-plus pricing became a requirement, attempts were made to introduce uniformity into cost computations. Trade associations in the various branches of the engineering industry became particularly active in this field.

In the early twenties several uniform charts of accounts were made public. Some of them apparently were influenced by wartime experiences. Probably the best known of these was the chart published by the trade association of the machine building industry, the *Verein Deutscher Mascinenbauanstalten* (VDMA), in 1921. The effect of these various charts on actual industrial accounting practices, however, seems to have been limited.

In 1927, Eugen Schmalenbach published his book *Der Kontenrahmen* on the subject, and approximately at the same time the *Reichskuratorium fuer Wirtschaftlichkeit* (RKW)[16] began to publish, under his guidance, model charts of accounts for various German industries. Schmalenbach brought not only new ideas, but he also began to popularize these ideas among practitioners as well as theoreticians. As he had a dynamic and forceful personality, his ideas, and in particular the charts of accounts that he had developed, soon acquired a considerable following. Although Schmalenbach's achievements in accounting and business economics were numerous, many writers have considered his chart of accounts to be the most important contribution he made to the development of German as well as European accounting practices.

[13] Karl Eicke, *Pflichtkontenrahmen und Pflichtkostenrechnung* (Berline-Vienna: Industrieverlag Spaeth & Linde, 1941), p. 9.

[14] Peter Scherpf, *Der Kontenrahmen* (Muenchen: Max Hueber Verlag, 1955), p. 8.

[15] Ibid., p. 14.

[16] *Reichskuratorium fuer Wirtschaftlichkeit* was organized in 1921 as a semiofficial body representative of German industries working in conjunction with the *Reichswirtschaftsministerium* (Ministry of Economic Affairs). Under the auspices of RKW, a number of committees was established for handling special problems. One of these committees, the *Ausschuss fuer wirtschaftliche Verwaltung* (Committee for Administrative Management), became a leading force for disseminating new ideas in the general area of industrial accounting, under the chairmanship of Schmalenbach.

While Schmalenbach's ideas began to spread in Germany in the late twenties and early thirties, the political system of the country underwent a radical change.

The National Socialists and Their Economics

The conditions for introducing a mandatory system of uniform accounting were particularly favorable in Germany under the National Socialist regime. The party ideology was opposed to the "liberalistic" economic system that allows free market forces to determine prices. This, in turn, meant that the self-regulating competitive market mechanism could not be relied upon to perform the necessary allocation of scarce resources. Consequently, other methods had to be found to control and to guide the economy. And the methods that were adopted represented, in effect, various forms of direct administrative controls. For instance, the primary objective in the area of capital allocation was to assure that capital was available for projects deemed to be "necessary" by the state. The following quotation explains this point:

> As to the allocation of the resources canalized through the capital market, the point had been repeatedly made in the Nazi economic press that a key control in this respect was the monopolization of the capital market by the Reich. The huge investment "tasks" of the state, it was claimed, required that all available resources of the market should be reserved for public borrowing; private investing was to rely, barring exceptional cases, upon other sources, primarily internal savings.[17]

Once the decision was made to use direct controls to guide the economy, several important consequences followed. Obviously, one of the basic controls that had to be used was price control. And administrative price control clearly implies use of cost, one way or another, in the price-fixing procedure. Furthermore, since the competitive market mechanism, with all its imperfections, had ceased to operate as a check against inefficiency, other means of control had to be found if gross inefficiency in the economy was to be avoided. In those circumstances uniform cost accounting schemes, which could be used as bases for intraindustry cost comparisons, were believed able to provide this alternative means of control.

A post–World War II German writer, referring to the National Socialist era, commented on the difference between a free market economy and a controlled economy and the resulting effect on accounting practices:

---

[17] Samuel Lurie, *Private Investment in a Controlled Economy* (New York: Columbia University Press, 1957), p. 99.

In a free economy business organizations and their accounting systems are oriented towards the market; handling of inter-firm transactions becomes a matter of prime importance. In a centrally controlled economy, where [free] markets have disappeared or where they have lost most of their functions, the emphasis will be shifted on to the movement of goods within a single firm; cost computation becomes a matter of primary importance. Accounting based on [uniform] charts of accounts builds a foundation for inter-firm [cost] comparison and it also serves price fixing purposes.[18]

In addition to the basic ideological antagonism of National Socialists to democratic capitalism and to a social system based on the operation of a free market mechanism, the process of building direct economic controls was apparently also accelerated by a desire to achieve economic self-sufficiency. This drive for self-sufficiency can be regarded again as part of the wider rearmament policy adopted by the German government after 1933. As economic independence became the goal, the economy had to be reorganized in a fairly short span of time. In order to execute such a reorganization, a complete control over the nation's economic resources became necessary.

As price control seems to have been one of the basic direct administrative controls used by National Socialists, both before and during World War II, a brief survey of its historical development is included.

Price control was inaugurated in Germany during World War I. It was abolished in the twenties, but in 1932 the Bruning government once more introduced controls in an attempt to bring down the prices of necessities. National Socialists, building on these previous experiences, at first attempted to institute their price policies through the medium of existing price control machinery and available cartel organizations. This approach was radically changed, however, in 1936 when an office of Reich Commissioner for Price Formation (*Reichskommissar fuer Preisbildung*) was established with extensive administrative powers. A contemporary source describes this change:

The new situation arising in connection with the Second Four-Year plan [starting in 1936] makes it necessary to change from a policy of *price supervision* to a policy of *price formation.* In addition to the former objective of preventing inflationary price rises, there is a new problem of adjusting prices and price relationships to the aims and purposes of the Second Four-Year Plan.[19]

[18] Translated by the author from Erwin Grochla, "Kritik und Weiterentwicklung des deutschen Kontenrahmens," *Zeitschrift fuer Betriebswirtschaft* 27 (October 1957): 558.

[19] *Weekly Reports,* 11 (January 12, 1938) 2; quoted by Lurie, *Private Investment,* p. 51.

One of the first steps taken by the newly installed Price Commissioner was to decree a general price freeze. From the very beginning, provisions for some equitable price determination procedure must have been obvious for various reasons, such as changes in imported raw material prices or as a result of the introduction of new products. At this stage costing procedures became important and "an effort was made to generalize the use of standard cost accounting in order to put computation of costs, and consequently the setting of prices, on a uniform and objective basis."[20]

In addition to information for price fixing, government departments required also certain other types of accounting data. Thus, once it was accepted that Germany was heading for war, raw material controls on a national basis became of utmost importance as many important raw materials had to be imported and, thus, under wartime conditions maximum economy in their use had to be enforced. Such a control could be greatly facilitated if the industrial and commercial accounting systems were so arranged that they would produce the necessary data as a by-product of the regular periodic accounting procedure. Furthermore, figures provided by the uniform cost accounting system could be easily adapted for placement and control of government contracts. And the value of uniform cost figures in this area is readily apparent to anyone who is even casually familiar with the cost-plus pricing practices generally prevailing in the governmental procurement process.

Thus the accession to power of National Socialists, because of both the ideological grounds and the rearmament drive that they started, made conditions in Germany favorable for the introduction of a mandatory uniform cost accounting system.

Another feature of the National Socialist ideology that seems to have had at least some influence on the accounting reforms that were to follow, was its attempt to distinguish between "financial" and "industrial" capital. One author explains this distinction as follows: "This ideology starts from the curious distinction between 'creative'; and 'rapacious' capital [*Schaffendes* and *raffendes Kapital*]. Creative capital is essentially industrial capital, rapacious capital is finance and trade capital."[21] As the new German accounting system distinguished sharply between financial accounting on the one hand and cost or workshop accounting on the other, we may reasonably assume that at least in part this dis-

[20] Lurie, *Private Investment,* op. cit., p. 53.
[21] Stolper, *German Economy,* op. cit., p. 236.

tinction followed from the underlying ideological dichotomy. At any rate, the new system prescribed that "as a part of the standardized model chart, all businesses, large and small, are compelled to record expenditure 'which is essential for the direct purposes of production' separately from that 'not incurred in direct connection with production.' "[22]

As a result of the ideological cross-currents described in the foregoing pages and the usual fiscal requirements, German business firms were forced to compute different "income" amounts for different purposes. As a minimum we can distinguish between three such basic income amounts:

1. Financial income as shown in the published financial statements. This amount and its supporting data were associated with the business as a commercial unit. It was computed in accordance with the provisions of the Company Law and quite possibly bore the odium reserved for "financial capital" at that time.
2. Factory income, which was computed in accordance with the rules of the new, mandatory, uniform cost accounting system. This income figure was designed to measure the performance of the plant as a technical unit. Thus, in this computation predetermined raw material prices and wage rates were used. The difference between these prices and the actual prices and wages paid were, in effect, ignored. "Commercial" expenses such as interest were excluded altogether. This clearly was the income figure associated with "industrial capital."
3. Finally every firm had to compute a taxable income figure which in case of smaller, noncorporate enterprises, was likely to correspond with or take the place of "financial income" as defined in point 1 above.

THE BASIC CHARACTERISTICS OF THE EMERGING UNIFORM SYSTEM

The distinction between financial and industrial accounting was emphasized. Not surprisingly, the reforms that were introduced had quite differing impacts on these two areas. For financial accounting, the reform movement centered on the new company law that was enacted in 1937.[23] The new law did not really bring any drastic changes in the existing financial accounting practices. Notably financial statement presentation, as prescribed by the law, was changed only in relatively minor details. The major emphasis in this area seems to have been on strengthening management's position vis-à-vis the stockholders. In particular,

[22] Singer, *Standardized Accountancy,* op. cit., p. 30.
[23] *Aktiengesetz vom,* January 30, 1937.

"the carrying of the National Socialist principle of leadership and personal responsibility into the structure of corporate enterprise"[24] was stressed.

In contrast to these minor modifications in the area of financial accounting, in industrial accounting a radical change was attempted. The new mandatory uniform cost accounting scheme was designed to become one of the major underpinnings of the National Socialist economic policy. The following quotation from the *Principles of Bookkeeping Regulations* issued in 1937 that introduced part of the system makes this clear:

> The new aims of the German economy call for increased output and efficiency from business undertakings. The fulfillment of this great task requires a thorough knowledge and a close control of all business transactions. Thus a well-developed accounting system is a primary factor in the reorganization of industry. The public interest and in particular the aims of the Four-Year Plan demand that the accounting system of all firms should be arranged on uniform principles. Systematic mutual exchange of experience, especially in the form of comparative analysis of companies will help towards this end.[25]

The system of uniform accounting was introduced basically in two stages. In the first place regulations to deal with "guidelines of bookkeeping" (*Buchhaltungsrichtlinien*) were introduced. The primary purpose of these regulations was to establish a uniform method of account classification. In particular, a uniform chart of accounts (Kontenrahmen) was developed for each industry group. The use of these charts was made mandatory. Although at the industry level each group had its own distinctive chart, all were required to conform to a basic national model chart (*Reichskontenrahmen*) which had been published as part of the *Principles of Bookkeeping Regulation* in November 1937.

The second stage of this uniform cost accounting system was represented by "guidelines for cost computation" (*Kostenrechnungsgrundsaetze*). The goal of these regulations was to ensure cost computation on a comparable basis. Alternatively, we may regard these regulations as valuation guidelines since they prescribed the manner in which certain assets, such as inventory, had to be valued in statements submitted to various government departments. We should note, however, that these valuation rules did not apply to published financial statements

---

[24] Lurie, *Private Investment,* op. cit., p. 143.

[25] Singer, *Standardized Accountancy,* op. cit., p. 15, quoting the *Principles of Bookkeeping Regulations* (*Grundsaetze fuer Buchhaltungsrichtlinien*), November 11, 1937.

which were prepared in accordance with the provisions of the company law.

Uniformity in cost computations, as in account classification, was introduced at two distinct levels. At first, regulations covering the whole of the German industry were issued in January 1939.[26] These regulations merely noted the basic rules to be followed by individual industry groups in preparing their own guidelines for cost computation. The intention was that at the industry level guidelines would be prepared in sufficient detail to ensure a desirable degree of uniformity in cost computation within any given industry.

The results that these uniform costing procedures were intended to produce have been described as follows:

> Once costs had been adequately defined and dissected in a uniform manner it became a comparatively simple matter to devise regulations prescribing which cost categories (*Kostenarten*), cost centers (*Kostenstellen*) and production cost units (*Kostentraeger*) were to be included in the computation of costs for a variety of purposes, and which were to be partly or wholly disallowed.[27]

This whole uniform system of industrial accounting was based on fixed accounting prices or standard charges (*Verrechnungspreise*). As one basic bookkeeping system to provide data for both, industrial and financial accounting, however, a method had to be devised to reconcile differences between the standard charges and the actual costs incurred. This was done by excluding price variances from cost accounts completely. They were accumulated in a separate adjustment account which was subsequently closed directly to the "financial" profit and loss account. Thus, while it is a common American practice to incorporate standard costing variances in the "cost of goods sold" once they have served their analytical purpose, in Germany the corresponding price variances were not commingled with other items of costs, but rather were grouped with various adjustments and extraordinary items quite separate from factory costs.[28]

Finally, it should be remembered that the introduction of the German system was considerably facilitated by price and wage controls that had become a part of the National Socialist economic policy long

---

[26] *Allgemeine Grundsaetze der Kostenrechnung*, January 16, 1939.

[27] Singer, *Standardized Accountancy*, op. cit., p. 44.

[28] For a brief discussion of this procedure see David H. Li., "Approaches to Uniformity in Accounting for Industrial Enterprises" (Ph.D. diss., Graduate College, University of Illinois, May 1953), p. 27.

before any wartime emergency. The connection between these controls and the uniform cost or workshop accounting has been explained as follows:

it may be useful to point to the connection between workshop accounting and the official policy of stabilizing prices and wages, pursued since the appointment, or rather reappointment in 1936, of a Price Commissar, and in the case of wages, even since 1933. This policy, by greatly diminishing the frequency of price, and wage variations, has made the standard charges much more accurate than they otherwise would have been. In particular, the burden thrown on the adjustment accounts has been greatly reduced.[29]

We can conclude from the foregoing that the introduction of the mandatory German uniform cost accounting system was in practice closely interwoven with the National Socialist economic ideology and with the policies that followed from that particular ideology. On the one hand, the adoption of various direct administrative controls made reliable and uniformly computed cost figures almost imperative for a reasonably smooth operation of the whole economic system. On the other hand, the very existence of those controls, by restricting price and wage movements, evidently facilitated the introduction of the new uniform accounting system. Similarly, the compulsory organization of industry into self-governing industry groups, generally based on the previously existing industry trade associations, provided the necessary administrative framework for the operation of the system.

A TENTATIVE EVALUATION OF THE GERMAN SYSTEM OF UNIFORM ACCOUNTING

The purpose of this article is not to develop a detailed evaluation of the advantages and disadvantages of the German system. In fact, there is some question whether such an evaluation is possible as the Germans did not have time to implement their scheme fully.[30] Nevertheless, some conclusions seem possible.

An important point to be considered in evaluating the German system is the environment in which it was forced to operate. Accounting does not function in a vacuum. On the contrary, it is closely interwoven with the social fabric of the society which it seeks to serve. Consequently, as the needs of society change, accounting should adapt itself to these

---

[29] Singer, *Standardized Accountancy,* op. cit., p. 33.

[30] For an attempt at such an evaluation see Rein Abel, "The German Experience with Uniform Accounting and its Relevance to the U.S. Controversies on Uniformity" (Ph.D. diss., Columbia University, 1967), pp. 163–73.

changes. In fact, as Littleton points out, there is a reciprocal relationship between accounting methods and the surrounding conditions:

> Accounting is relative and progressive. The phenomena which form its subject matter are constantly changing. Thus surrounding conditions generate fresh ideas and stimulate the ingenious to devise new methods. And as such ideas and methods prove successful, they in turn begin to modify the surrounding conditions.[31]

Therefore, the question really is whether the German uniform accounting system did in fact serve adequately, or at least could have been expected to serve adequately, the needs of a totalitarian society, ideologically committed to a controlled economy and heading for or actually engaged in a major war. At least the basic precepts of the system seem sound in view of the prevailing circumstances. In particular the following points seem significant:

1. The German system was designed to operate in a controlled economy where most of the tests of economic efficiency incorporated in a free market economy were absent. Therefore, it was quite logical that a strong emphasis be placed on finding alternative means of ensuring that the highest possible degree of efficiency is attained by the economy. This search for alternatives led to the concept of comparability of cost accounting data and hence to uniform accounting.
2. The architects of the German system realized that their goals would not be achieved if the drive for uniformity were limited to financial accounts only. A comparability of income statement and balance sheet data alone would not have been sufficient in the circumstances. In order to provide an adequate tool for increasing industrial efficiency, the proposed uniform accounting system also had to include the cost accounts.
3. Once it was conceded that the proposed scheme had to include the cost accounts, the industry-by-industry approach was selected as the rational way to implement the scheme. Not only were many possible technical difficulties alleviated by selecting this approach, but it is also evident that by associating the more prominent accountants in different industries with the preparation of the schemes which they themselves later had to apply, a successful way was found to identify active industrial accountants with the new uniform accounting system.
4. Whatever the shortcomings of the mandatory scheme at the more sophisticated level of accounting, there seems to be substantial evidence

[31] A. C. Littleton, *Accounting Evolution to 1900* (New York: American Institute Publishing Company, 1933), p. 361.

that as a result of introducing the new system the quality of accounting was improved in smaller firms where the work was frequently entrusted to ill-trained bookkeepers. This conclusion may be of some relevance today when considering the plight of accounting in under-developed countries where the skilled accounting talent is frequently in short supply. Moonitz seems to support the view that the answer in these circumstances might very well be some type of mandatory uniform accounting:

> It is usually the "primitive" society that has the largest number of rigid rules controlling every action the individual takes. Sophisticated societies allow much more freedom at the level of individual practice, but still within the limits of a fairly clearly defined set of principles.[32]

Although we have emphasized thus far in this section the more positive features of the German system, this does not mean that the system had no disadvantages. It may be argued that the most important disadvantage of the system was not practical or even theoretical shortcoming. Rather it was the heritage it bequeathed to the post World War II generation of German accountants and to their way of thinking. This basic shortcoming was noted by a perceptive German critic of the postwar era:

> Uniformity itself has become the goal. Yet intraindustry comparisons do not need anything more than agreement within a given industry, although even here we meet difficulties due to differences in geographical location, manufacturing experiences, production plans, size of the plant. . . .
>
> Developments up to now have led to a significant rigidity and to a concern with outward forms in accounting. . . .
>
> Most accounting texts have developed a style similar to legal commentaries and the competent bookkeeper is saddled with the task of learning by heart all the rules and regulations. Independent thought about the problems involved in real accounting relationships is forced to the background.[33]

In practice the complete system of mandatory uniform cost accounting, as envisaged by its architects, did not have an adequate trial in Germany. We noted earlier that the complete system consisted essentially of two parts: (1) "Guidelines of bookkeeping" (*Buchhaltungsrichtlinien*), which included the compulsory charts of accounts (*Kontenrahmen*),

[32] Maurice Moonitz, "Why Do We Need 'Postulates' and 'Principles'?" *The Journal of Accountancy* 117 (December 1963): 46.

[33] Translated by the author from Erich Kosiol, "Grundsaetzliche Bemerkungen zum Gemeinschaftskontenrahmen," *Neue Betriebswirtschaft,* November 20, 1950, p. 116.

and (2) "Guidelines for cost computation" (*Kostenrechnungsgrundsaetze*). While the detailed regulations issued in 1939–1940 covered apparently most of the German industry as far as the first of these two parts was concerned, only one industry group — machine building and allied industries — managed to issue its detailed industry guideline under the second heading before Germany collapsed. Even this guideline was published only in the middle of 1942 and there is some question as to what extent it was actually employed in practice. In the critical late stages of the war there were shortages of every type ranging from qualified personnel to textbooks. Furthermore, in many cases, the new accounting system was apparently regarded at the plant level as a "luxury" that could and should be overlooked in the dire wartime emergency conditions.

Irrespective of its advantages or disadvantages, the German experience with uniform accounting in the thirties and forties became an important influence in shaping the postwar development of accounting not only in Germany, but also in other continental European countries. It can be argued that this influence has not been wholly beneficial. The basic objection is that as a result of this influence much of the postwar European accounting effort has been directed to apply elements of an accounting system, designed for a controlled economy, to economies that have succeeded to a considerable extent in restoring the automatic regulatory mechanism of a free, competitive market. Yet this basic criticism cannot negate the fact that the German experience has remained a strong factor in formulating European thinking of accounting in recent years.[34]

CONCLUSION

The underlying theme of this paper has been that environment is an important determinant in establishing the characteristics of accounting practices that are suitable for and probably prevail in a given country at any given time. Consequently any drive for greater international uniformity must consider these environmental factors. In particular, we should not assume that accounting practices that have proven successful

[34] For instance, at the very first Congress of the *Union Europeenne des Experts Comptables* (UEC) in Florence in 1953 an Accounting Techniques Committee (*Technique Comptables*) was established and charged with developing a uniform "European Chart of Accounts." The Committee eventually presented a draft of such a Chart at the Fifth Congress in Vienna in 1964.

in one country could be transplanted to another country without regard to differences in the business, economic, and cultural environment.

The case of Germany in the thirties was presented in an attempt to illustrate this point of view. The political ideology and its economic ramifications prevailing in the country at that time clearly imposed some extraordinary challenges to German accountants of that day. This writer believes that this challenge was met with a high degree of original thinking and with considerable vigor in attempting to implement the uniform cost accounting scheme that was developed. These German efforts have been, on the whole, little understood and even less appreciated by accountants with the traditional Anglo-American background.

This does not mean, of course, that the German approach to accounting uniformity is or was a panacea to be embraced by accountants elsewhere. It has been already indicated that it is quite possible that the influence of this German experience on postwar European accounting has been, on the whole, harmful rather than beneficial. Yet it is contended that in its own environment it was an appropriate response to the needs for accounting data in a totalitarian state running war-directed economy.

In summary, the author's hypothesis is that environment is an important factor in determining the characteristics of any given set of national accounting practices. Hopefully the validity of this assertion has been demonstrated in the case of Germany in the thirties. Yet, to generalize on the basis of this single case study would be clearly improper. Furthermore, if we argue, as was done throughout this paper, that any progress towards greater international uniformity in accounting should be tempered with a due appreciation of national idiosyncracies, it would be useful to know how to identify those characteristics in any given business and economic environment that seem to make certain features mandatory or at least highly desirable in a corresponding national accounting system. A more comprehensive study now seems necessary.

The Behavioral Science Milieu of Accounting

JOHN J. WILLINGHAM* AND JAMES E. SORENSON†

Science has been built by some of the damnedest methods, but the strategy I follow starts with a scanning of the literature within a particular field in search of the sheer, approximate, empirical propositions. . . .[1]

Since accounting became recognized as a subject deserving special study, students and practitioners have generally regarded their work as an art rather than a science. Most of the concepts, theories, and practices of the accountant seem based largely on simple but systematic classifications. A few low-order statistics have been added to increase the complexity, but to the dismay of most users and preparers, there are no "laws" or theories of the type found in physics or chemistry.

The purpose of this paper is to educe the scientific content of accounting with a special emphasis on the *behavioral* dimensions. The paper uses the scientific content of social explanation as a point of departure in viewing a comparative analysis of accounting and scientific explanations. The analysis concludes that accounting is a subset of — or perhaps an adjunct discipline to — the behavioral sciences; the implications of this conclusion are explored with reference to the application of behavioral science concepts and research techniques to the practice of and research in accounting.

---

* John J. Willingham is Professor and Head of the Department of Accounting at the University of Texas (Arlington).

† James E. Sorenson is an Associate Professor in the Division of Accounting and Quantitative Methods, College of Business Administration, the University of Denver.

The authors are indebted to professors Kenneth A. Smith and Nicholas J. Gonedes for their comments and criticisms of earlier drafts of this article.

[1] George Caspar Homans, *Social Behavior: Its Elementary Forms* (New York: Harcourt, Brace & World, Inc., 1961), p. 9.

THE SCIENTIFIC CONTENT OF SOCIAL EXPLANATION

The relationship between man and science is circular, that is, the capability for scientific explanation is reserved to man and one of man's pursuits is the study of himself. Human beings have always considered themselves unique. The most important implication to be derived from this uniqueness is that scientific explanation is a culturally-based phenomenon; it follows that the superiority of man in the sentient world is significant in the explanation of these phenomena.

The Cultural Substructure of Science

Culture, as used here, is defined as

> social heredity — the total legacy of past human behavior effective in the present, representing the accumulation through generations of the artifacts, knowledges, beliefs, and values by which men deal with the world. It is the precipitate of *learned* human adjustments to the physical environment and to society.[2]

The concept of science consists of both beliefs and behavior. Subsumed under the concept of culture, scientific beliefs and methods are handed down from generation to generation. Definitions of science and typologies of scientific explanation abound.

> The extensive literature addressed to the definition or characterization of science is filled with inconsistent points of view and demonstrates that an adequate definition is not easy to attain. Part of the difficulty arises from the fact that the meaning of science is not fixed, but is dynamic. As science has evolved, so has its meaning. It takes on a new meaning and significance with successive ages.[3]

Each succeeding generation alters some aspects of the culture of man including the knowledge, beliefs, methods and consequently, the definition of science.

The import of this discussion may be briefly summarized: even the definition of what is — or what is not — scientific is culturally-based and imbedded in behavioral evaluations which change over time. The case for accounting as a science rests on the answers to two questions that currently emerge from the cultural substructure of science: (1) "Does it discover?" and (2) "Does it explain?" "By the first we judge whether it is a science, by the second, how successful a science it is."[4] An exami-

---

[2] Robin M. Williams, Jr., *American Society: A Sociological Interpretation* (New York: Alfred A. Knopf, 1960), p. 22.

[3] Russell L. Ackoff *et al., Scientific Method: Optimizing Applied Research Decisions* (New York: John Wiley & Sons, Inc., 1962), p. 1.

[4] George C. Homans, *The Nature of Social Science* (New York: Harcourt, Brace & World, Inc., 1967), p. 7.

nation of the physical science–social science controversy, the measurement process used in assessing social phenomena, and a comparison of accounting and scientific explanations are useful in assessing the "discovery" and "explanatory" credence of accounting.

The Physical Science–Social Science Controversy

Most would agree that the so-called physical sciences are all indeed sciences. The recognition of the social sciences as sciences is as yet incomplete. Often the social sciences are considered relatively new and this is a reason for lack of acceptance of them as sciences. This argument fails to consider one important fact; the social sciences are very old. However, while the study of social phenomena has an ancient origin, there has been only a modicum of social energy expended to develop it until very recently.

Another argument for exclusion of social science from the realm of science is factual but not valid. The social sciences are often considered inexact when compared to the physical sciences. Often probabilities inherent in explanations are lower when the subject is social phenomena and, generally, precision of prediction ranks high in order of scientific importance. (In passing, anthropologists note that curiosity and concern with the future represent a current cultural bias; they have observed previous cultures in which this concern was absent.) Kuhn suggests that an understanding physical scientist will

> acknowledge that the reason the physical sciences have such an apparently admirable record of predictability is that they have confined their attention mainly to the relatively simple phenomena where accurate predictability is feasible while conspicuously ignoring the complex situations where predictive accuracy is low, on the grounds that they are problems of engineering, not science.[5]

Kuhn then goes on to explain the differences between the physical and social sciences in the following fashion.

> It is customary to say that the physical sciences are precise and predictable, whereas the human sciences are vague and unpredictable. It is more meaningful to say that situations subject to one or few dominant forces are more amenable to understanding and accurate prediction than situations subject to many forces with none dominant. The social sciences are less predictable than the elemental physical sciences precisely because there are so many forces in operation at any one time.[6]

The physical-social controversy will probably continue. Social scientists

[5] Alfred Kuhn, *The Study of Society: A Unified Approach* (Homewood, Illinois: Richard D. Irwin, Inc., and The Dorsey Press, Inc., 1963), p. 9.
[6] Ibid., p. 10.

attempt to use the methods of physical science; this can be attributed to emulation of the model of science developed by physical scientists. On the other hand, social scientists are confronted with phenomena which often do not closely resemble physical phenomena.

Measurement of Social Phenomena

While social phenomena differ from physical phenomena, the difference is more one of degree than of kind. In the physical sciences, for example, liquid can be distinguished from nonliquid, that is, if a substance is not liquid, it can be fitted into another class such as solid or gas. The intractability of social phenomena presently does not allow this degree of precision. Sociology, for example, is built upon such concepts as norm, role, and status. These concepts provide bases for a classificatory system which cannot be viewed as being capable of providing either collectively exhaustive or mutually exclusive classes of phenomena.

When exploring the physical world it is also much easier to provide concrete examples from which students can learn the properties of the phenomena under study. It is possible to illustrate items or substances with physical existence. This is of course not universally true, but much more generally true of physical phenomena than social phenomena. In addition, the physical sciences manifest a greater degree of agreement on operational definitions and the predictive ability of the operational definitions employed by the physical sciences appears to be higher.

Psychologists deal with properties such as motivation, perception, and individual traits such as succorance, dominance, and aggression, and so on. The mention of these concepts conjures up notions of the existence of something rather imprecise as do the sociological concepts of norm, role, status, and social cohesion. At this point we ask whether accounting concepts are not more akin to concepts of the social sciences than to those of the physical sciences. The concepts of asset, liability, expense and income seem to conjure up no more precise ideas than social science concepts. We suggest that income is no more susceptible to precise understanding and measurement than are succorance or social cohesion, for example. While accountants may not agree upon the nature of the basic data of accounting, there are many examples of specific items that accountants agree are either admissible or inadmissible to the accounts of organizations. Like many disciplines which are considered behavioral sciences, accounting displays similar measurement characteristics.

The intractable nature of social phenomena has led to extreme difficulties in measurement. Philosophers admonish scientists to make their

measurements meaningful by clearly defining the properties to be measured. Thus far, precise social definitions have proved difficult.

In the social sciences the singling out of relevant properties is in itself a major problem. No standard terminology has yet been developed for this task. The properties are sometimes called aspects or attributes, and often the term "variable" is borrowed from mathematics as the most general category. The attribution of properties is interchangeably called description, classification, or measurement, using this last term in a very broad sense.[7]

A few accountants have concerned themselves with this same problem. Larson states that "continued and increased attention must be directed toward the isolation and refinement of appropriate properties to be measured in accounting."[8] The isolation and definition of properties are extremely important pursuits; however, it would be unfortunate if social scientists and accountants were to use all their resources in this effort. In fact, we suggest that empirical studies which attempt to measure *presumed* properties may, in the long run, help to isolate and define social science and accounting properties. In recent years, for example, psychology has been characterized by pragmatism and practicality. This period has seen the development of many psychological scales and inventories that presume to measure psychological or personality traits, attitudes, intelligence levels, motivation, perception, and many other metaphysical properties of man's nature. In a sense, many social scientists have decided that it is, at present, a futile exercise to attempt to define, for example, intelligence or motivation. Rather, the approach has been to develop tests that measure some property which is simply presumed to be intelligence or motivation. This approach fails to produce cardinal or aggregate measurements. Nevertheless, relative (probability) statements in the form of norms and deviations from norms have allowed a great deal of predictability to enter into social analysis.

At this point, one may conclude that the study of the social sciences is extremely difficult because of the chaotic states of the disciplines. However, social explanation does have scientific content and predictive statements can be made about social phenomena. Furthermore, since the subculture of science determines what is or what is not science, all definitions, methods, and measurements of science are ultimately defined behaviorally. We now turn to a more direct argument for accounting as a subset of the sciences.

---

[7] Paul F. Lazarsfeld and Morris Rosenberg, *The Language of Social Research* (New York: The Free Press, 1955), p. 15.

[8] Kermit D. Larson, "Implications of Measurement Theory on Accounting Concept Formulation," *The Accounting Review* 44 (January 1969): 47.

ACCOUNTING AND SCIENTIFIC EXPLANATIONS

Before pursuing the explanation of accounting vis-à-vis behavior and the present state of behaviorally-oriented accounting research, evidence of the creditability of accounting as a scientific subject is presented. For this purpose we have chosen to use the typology of Nagel. In his view "the sciences seek to discover and to formulate in general terms the conditions under which events of various sorts occur, the statements of such determining conditions being the explanations of the corresponding happenings."[9]

Nagel suggests four types of explanations: (1) deductive, (2) probabilistic, (3) functional, and (4) genetic. In each of these four explanations, data are accounted for by a link to other warranted statements which are plausibly and logically grounded on other established statements. Figure 1 compares examples of *explanations* of several recognized sciences and some of those offered by accounting.

[9] Ernest Nagel, *The Structure of Science: Problems in the Logic of Scientific Explanation* (New York: Harcourt, Brace & World, Inc., 1961), p. 4.

Figure 1. A Comparison of Scientific and Accounting Explanations

Examples of Scientific Explanations	*Examples of Accounting Explanations*
I. Deductive: Consequence of Logical Manipulation Based on Well-Established Premises	
Well-established premises:	Well-established premises:
A. Under certain conditions gases condense into liquids; for example, moisture forms on the outside of a glass filled with crushed ice.	A. Depreciation is a deduced concept based on several generalizations about physical and technological deterioration.
B. Every object attracts every other object with a certain amount of gravitational pull; the amount of the pull depends on the mass of the object and the distance between the objects; for example, the alternate rising and falling of the surface of the oceans twice each day (tides) can be explained by the unequal gravitational attraction of the sun and moon on different parts of the earth.	B. Interperiod income tax allocation is deduced from a generalization about "matching" of revenues and expenses.
	C. The premise of entity permits accountants to deduce methods of accounting for business combinations and divisions, and preparation of consolidated financial statements.

Figure 1. Continued

Examples of Scientific Explanations	*Examples of Accounting Explanations*
II. Probabilistic: The Behavior of a Single Element (or Subset of Elements) of a Class Explained in Terms of Highly Probable Statements About the Behavior of the *Total* Class	
Highly probable statements about total class:	Highly probable statements about total class:
A. A high proportion of heavy smokers develop lung cancer; therefore the behavior of a single element (or subset) may be explained by reference to the generalization, for example, an individual who has lung cancer may explain his dilemma by reference to his habit of heavy smoking. B. The wearing of trousers by males can be attributed to a normative prescription present in most areas of the world, that is, it is highly probable that, because of this norm, men will wear trousers rather than some other garment to cover the lower half of their bodies. Any male wearing trousers probably does so only because of his cultural bias.	A. Continuing entities ("going concerns") are likely to demonstrate positive earnings per share and favorable current ratios. Therefore the behavior of a single element (for example, a company) may be explained by reference to the general statement: a company which is producing positive earnings per share and a positive current ratio is likely to continue over time. [Unfortunately these probabilistic statements are contaminated by measurement alternatives, timing of measurements, business objectives, and so on; in general, however, these relationships must hold or the entity will pass from existence. An entity may continue for a long period of time even though it suffers losses and may be technically insolvent ($CA < CL$) because it serves some private purpose (for example, monopoly) or some social purpose (for example, a public corporation designed to subsidize rural electrification). In brief, differences in accounting, purpose of the business, and timing can all affect probabilistic accounting statements.]

Figure 1. Concluded

Examples of Scientific Explanations	*Examples of Accounting Explanations*
III. Functional: Explanation Through the Role Something Plays in Maintaining the State of a Given System	
Role in maintaining the system:	Role in maintaining the system:
A. (Biology) Lungs or gills maintain the chemical processes required for life.	A. The double entry mechanism maintains arithmetical balance of amounts entered into the accounting system.
B. (Behavioral science) Social stratification facilitates the distribution and integration of societal tasks for the continuation of the society.	B. A chart of accounts performs a taxonomic function. It allows systematic classification of all data admitted to the accounting system.
	C. Accounting reports provide information for control of resource allocation *within* the firm (for example, responsibility accounting) and resources allocated *to* the firm (for example, investors and creditors).
IV. Genetic: Explanations Based on Evolution from Earlier States	
Evolution from an earlier state:	Evolution from an earlier state:
A. The presence of words of Latin origin in the English language is, in part, explained through the Norman conquest.	A. The income statement has evolved from a single income account which originally contained all items of revenue and expense. Early income reports contained little detail which may also partially explain current income reporting practices in this respect.
B. The present physiological characteristics of man have evolved over a period of time.	B. Depreciation is an outgrowth of venture accounting where the ventures became long-lived and multi-purpose and the earnings of the venture had to be estimated at several points during a long period of life.
C. The New Style Gregorian calendar now in use in most parts of the world can be traced back to 1582 when Pope Gregory XIII prescribed it to correct the Julian year to the solar year.	C. Current audit methodologies and professional pronouncements for inventories and receivables can be traced to major audit problems of the 1930s.
D. Current forms of human social organization have evolved from the elemental social unit of the pair bond.	

Examination of Figure 1 reveals something of the nature of accounting explanations: Many of the explanations are concerned with the *proceess* of accounting rather than with the substance or *phenomena* with which accounting deals. This is not true of other sciences. Other disciplines are primarily concerned with explaining characteristics and functions of the phenomena with which they deal. The behavioral sciences have isolated basic phenomena; they now struggle with further definition and classification. Accounting seems to lag behind the behavioral sciences since it has not yet determined its subject matter.

The behavioral sciences exhibit numerous probabilistic explanations and many well-developed functional explanations. The probabilistic accounting explanations and item "C" of the functional accounting explanations deal with the results of the accounting process. While these explanations do not define the basic phenomena, they imply the existence of the data of accounting. These two explanations concentrate on the influence of accounting on the world outside of accounting, but most accounting explanations have not been operationally defined to include their effects on people.

If the comparisons in Figure 1 are valid, then the accountant has good reason to define himself as a "scientist" albeit one with a large preoccupation with measurement and communication processes, and, up to this point, a relative disinterest in behavior; the issue now becomes one of identifying the behavioral dimensions of accounting.

BEHAVIORAL SCIENCE ASPECTS OF ACCOUNTING

Accounting has been defined in many ways but most of the current definitions offered by the academic and professional circles include or imply measurement and communication of economic data for selected and varying *behavioral* objectives, including decision-making. For example, variance analysis in standard costing is presumably justified by the part the accounting information can play in guiding and correcting the human-physical resource relationship. In a similar way, net income per share is an accounting indicator that is presumably used by the existing or potential shareholder in his buy, hold, or sell decisions (investment behavior).

Most definitions of accounting, however, fail to *emphasize* the behavioral foundation of accounting and, without a largely behavioral rationale, accounting would simply become an idle and pointless exercise in arithmetic. Not only can accounting summarize huge quantities of behavioral interactions (for example, witness the capability of finan-

cial statements), accounting measurements can become the reason for behavior (for example, goal-setting and interaction oriented toward budgets). In brief, accountants account *for* behavior and accounting measurements can be the *objects* of behavior.

Accounting-Behavior Relationships

Accounting is legitimately concerned with the measurement of economic resources and accounting should be concerned equally with scientific statements about accounting-behavior relationships. Accounting appears to be included in an influential definition of the behavioral sciences offered by James G. Miller: "Behavioral science is a combined endeavor of many fields investigating all aspects of behavior, leading to understanding of human beings as individuals and in social relations. Behavioral science therefore includes . . . economics, . . . mathematics, . . . psychology, sociology, statistics. . . ."[10] The accounting-behavior relationships should be expressed in hypotheses and confirmed experimentally through reference to empirically observable variability in behavior. Phenomenological differences have produced an imperfect application of physical science methods to the behavioral sciences. However, the behavioral sciences have emulated the methods of the physical sciences with some success; undoubtedly accounting research would greatly benefit by emulating the social sciences' use of the scientific mode of inquiry.

In a description of the emerging status of the behavioral sciences, Handy and Kurtz present a relevant argument for inclusion of accounting as a "developing" science:

> Much of the successful work in the behavioral sciences begins with simple description and then proceeds to more systematic classification, including taxonomic or topological ordering, statistical ordering in terms of averages (means, modes, and medians), deviations, etc., and evolutionary ordering in terms of stages of development.
> The view here is that systematic, testable, classificatory work can be called "scientific" and that the lack (at least to date) of highly generalized testable hypotheses does not make the behavioral areas "non-scientific," but only less developed. . . .[11]

If accounting is ever to become fully recognized as a science (behavioral or otherwise), accounting must be able to demonstrate its

[10] James G. Miller, "Statement of the Director," *Mental Health Research Institute Fourth Annual Report* (Ann Arbor: University of Michigan, 1960), p. 7.
[11] Rollo Handy and Paul Kurtz, *A Current Appraisal of the Behavioral Sciences*, Behavioral Research Council Bulletin (Great Barrington, Mass.: 1964), p. 8.

scientific basis; impressionistic belief or claims from professional bodies will be insufficient.

BEHAVIORAL RESEARCH NEEDS IN ACCOUNTING

Nearly seven years after publication, Devine's words are still appropriate:

> Accounting is the leading form of communication-and-control language of business, and it would seem to follow that accountants should be at home among the concepts of psychology, sociology, and the behavioral sciences in general. The truth is that accountants have almost no such knowledge, have developed little rapport with these related fields, and have made some fantastically naive behavioral assumptions (along with some reasonably astute ones).[12]

Perhaps accountants are on the verge of discovering the behavioral sciences. There seems to be an increasing interest in behavioral concepts and a steady evolvement in the use of behavioral science concepts and techniques. Thus far, behaviorally-oriented studies by accountants fall into three categories:

1. Behavioral descriptions of the accounting environment and enumerations of actual and/or desirable behavioral assumptions of accounting.
2. Empirical and laboratory studies that have recorded behavior in situations in which accounting procedures and reports were present in the social environment.
3. Empirical and laboratory studies that have attempted to explain behavior in situations involving accountants and/or accounting procedures and reports by reference to behavioral concepts and/or behavior patterns previously observed by behavioral scientists.

Representative of the first category of behaviorally-oriented studies are those of Caplan[13] and Willingham.[14] Caplan attempted to enumerate both actual and "modern" assumptions of management accounting. He then attempted to observe the presence or absence of them in actual organizations. Willingham used the sociological concepts of norm, role,

[12] Carl Thomas Devine, "Some Behavioral Aspects of Accounting," Essays in Accounting Theory, vol. 1, mimeographed (Tallahassee, Florida, Carl Thomas Devine, 1962), pp. 70–71.
[13] Edwin H. Caplan, "Behavioral Assumptions of Management Accounting," *The Accounting Review* 41 (July 1966): 496–509; and "Behavioral Assumptions of Management Accounting: Report of a Field Study," *The Accounting Review* 43 (April 1968): 342–62.
[14] John J. Willingham, "The Accounting Entity: A Conceptual Model," *The Accounting Review* 40 (July 1964): 543–52.

position, and social organization to develop a behavioral model of the accounting entity.

The breadth of such studies precludes precise results; however, they afford a good beginning for application of other disciplines to accounting. Readers of the results of these studies can begin to become familiar with behavioral terminology and concepts. Because these studies are necessarily broad and general, the implications for accounting are often neither clear nor precise. Thus, by themselves, they are inadequate for the task of relating accounting and behavioral disciplines.

Empirical studies that record behavioral differences in accounting situations (category 2) prove even more inadequate to the task of relating accounting and behavioral science. Examples of this type of accounting research include the works of Bruns[15] and Dyckman.[16] Both Bruns and Dyckman recorded differences in behavior in situations where different accounting procedures were used. The only conclusion that can be reached in studies such as these is that, *ceteris parabus,* accounting procedures may affect the behavior of users of accounting reports. Such studies do not require any knowledge of behavioral science nor are they capable of attributing behavior to generally known behavioral patterns. In essence, they *monitor* behavior in accounting situations but do not *associate* this behavior with any principles, concepts, or knowledge already present in either accounting or the behavioral sciences.

Since studies of the first two types constitute the majority of behaviorally-oriented research done so far by accountants, there are virtually no empirically based generalizations about the effect, if any, of accounting on either task behavior or decision-making behavior. In addition, as has been suggested earlier, accountants as yet not related their work to known, general behavioral expectations. One study that has attempted to do this makes this same criticism in the following manner:

> an even more important question than whether different accounting methods have *any* effects upon decisions is: *under what conditions do variations in accounting methods produce different decisions,* and *why are* (or *are not*) different decisions produced by using different accounting methods?[17]

---

[15] William J. Bruns, Jr., "Inventory Valuation and Management Decisions," *The Accounting Review* 40 (April 1965): 345–57.

[16] Thomas R. Dyckman, "The Effects of Alternative Accounting Techniques on Certain Management Decisions," *Journal of Accounting Research* 2 (Spring 1964): 91–107.

[17] Yuji Ijiri, Robert K. Jaedicke, and Kenneth E. Knight, "The Effects of Accounting Alternatives on Management Decisions," *Research in Accounting Measurement* (Evanston, Illinois, American Accounting Association, 1966), pp. 186–99.

This particular study by Ijiri, Jaedicke, and Knight falls into the third category of behaviorally-oriented accounting studies and is one of only a few research efforts that have attempted to tie behaviorally-oriented accounting research to concepts in accounting and the behavioral sciences.

Another study by DeCoster and Fertakis[18] attempted to examine the consequences of increased budget pressures on supervisory behavior using the Halpin and Winer (Ohio State Leadership Studies) factors of "initiating structure" and "consideration." While the results were interesting (initiating structure and consideration both increased with budget pressures), they were inconclusive since controls at the personality, small group, and organizational levels of analysis were not complete.

An example of a behavioral study of accountants attempted by Sorensen claimed the following objective:

> to determine whether the normative foundations of bureaucratic and professional organization viewed through the sociological (and social psychological) concepts of self and role could help to explain the variability in occupational status orientations, job satisfaction, and job migration plans of CPAs in large public accounting firms.[19]

While the results of this study were too general for direct application to accounting practice, the study did empirically demonstrate several major sociological concepts dealing with complex *accounting* organizations.

In a research proposal on the effects of accounting information on user behavior, Horngren, Jaedicke, and Bavelas, hope to "build a theory of the effects of accounting information on decision . . . without being dependent on the differences in the individual personalities of the users."[20] In the eyes of these researchers:

> The pertinent questions, therefore, are not those that ask about the relation of personality traits (personality values, aspiration level, and the like) to inconsistent choice behavior, *but those that ask how inconsistent choices relate to the way in which the information is presented.*[21]

While many other studies could be quoted, our general conclusion

---

[18] Don T. DeCoster and John P. Fertakis, "Budget-Induced Pressure and Its Relationship to Supervisory Behavior," *Journal of Accounting Research* 6 (Autumn 1968): 237–46.

[19] James E. Sorensen, "Professional and Bureaucratic Organization in the Public Accounting Firm," *The Accounting Review* 42 (July 1967): 553.

[20] Charles T. Horngren, Robert K. Jaedicke, and Alexander Bavelas, "Effects of Accounting Information on User Behavior" (Research Proposal, Graduate School of Business, Stanford University, July 1968), p. 1.

[21] Ibid., p. 12.

is the same: Comparison of the various studies reveals dramatically different approaches to behavioral research in accounting, but, in our opinion, behaviorally oriented accounting studies in the third category are sparse and desperately needed if accounting is to progress and become more useful. At this time, most probes by accountants into the realm of the behavioral sciences have been too shallow to be of any real significance.

Behavioral topics such as personality, small groups, organizations, and societies may be identified as areas of interest to accountants. Even the disciplines specializing in these areas have made uneven contributions to the professional literature and research findings. Without additional research (which has not been contemplated by anyone in the professional accounting literature), no one is yet capable of specifying which of these levels of behavioral inquiry will be the most beneficial to accounting; superficially, there seems to be no reason why any level should be ignored although small groups and organizations appear to have more urgency and direct application. These specialties as well as accounting face a demand for specialization on the one hand and the need for cooperative inquiry on the other; these contradictory forces should not justify any further delay of interdisciplinary efforts, especially on the part of accountants who have acquired a usable level of knowledge in any one of the behavioral sciences.

Because so few accountants can validly comment on the *desired* direction of behavorial accounting development, there is a real need for a sharing of thoughts on how and where accounting should approach and use behavioral science concepts and methodologies; the combined interest and effort of the most interested and best trained *behavioral* accountants (e.g., at conferences at which position papers could be presented and uninhibited discussion promoted) should produce guidance for faculty and administrators concerned with pedagogical and research issues tied to the behavioral sciences. This must be a group effort since no one individual or school is equal to the task. Slowness to access the best thinking of behavioral accountants will seriously retard, if not dissipate, the development of behavioral accounting science. Through such an effort, perhaps accounting can still achieve its potential role as a science.

CONCLUSION

Accountants generally make assumptions about human behavior (especially at the small group and organizational levels of analysis) and

accounting can only reexamine its behavioral assumptions through a greater understanding of and involvement in the behavioral sciences. The discipline of accounting has long neglected empirical research in favor of arm-chair philosophy and accounting is not likely to add much to man's store of knowledge until existing and emerging behavioral research and conceptualizations are integrated into the accountant's behavioral milieu. In a sense, all fields of inquiry are continuous and division is justifiable only to permit specialization; accounting has been slow to study its scientific relationship to behavioral phenomena.

Accounting Information for Decision-Making

R. C. SKINNER*

In 1923, J. M. Clark in *Studies in the Economics of Overhead Costs* propounded in a particularly clear and forceful way the doctrine of "different costs for different purposes."[1] His message has been surprisingly slow in gaining widespread acceptance; the first review of the book in an accounting journal did not appear until forty years later.[2] Clark's doctrine now is fairly widely accepted, although apparently not by all practicing cost accountants. Two major cost accounting texts, those by Professors Horngren and Shillinglaw,[3] were written with Clark's doctrine obviously at the forefront of the authors' minds; the Horngren book is probably the most widely used cost accounting text at present, and it is regarded by many authorities as being the best currently available.[4]

---

* R. C. Skinner, M.A., A.C.W.A., is Senior Lecturer in Accountancy in the Department of Business Studies, University of Otago, New Zealand. He was previously on the staff of Liverpool University, U.K. He is a graduate of Oxford University, and a member of the Institute of Cost and Works Accountants, U.K. He has published articles in academic and professional journals on accounting, economics and statistics, and philosophy.

[1] J. M. Clark, *Studies in the Economics of Overhead Costs* (University of Chicago Press, 1923). The book is, fortunately, still in print. Those parts of it which are most relevant to accounting are the preface and chapters 1, 2, 3, 9, 11, and 12.

[2] S. Davidson, "Old Wine into New Bottles," *The Accounting Review* 38 (April 1963): 278–84.

[3] C. T. Horngren, *Cost Accounting: A Managerial Emphasis,* 2nd ed., (Englewood Cliffs, N.J.: Prentice-Hall, 1967). G. Shillinglaw, *Cost Accounting-Analysis and Control,* 2nd ed. (Homewood, Illinois: Richard D. Irwin, 1967).

[4] It is very surprising, however, that neither of these books appears in the recommended reading for the examinations of the Institute of Cost and Work Accountants. See *Management Accounting* 47 (September 1969).

Partly as a result of Clark's work, it is now common to distinguish four major purposes for which managers are likely to need cost accounting data. These general purposes are:

1. *Stock valuation.* What is required for this purpose, particularly the valuation of work-in-progress, is information concerning the production cost of units of output. The information is necessary for the preparation of profit and loss accounts and balance sheets, so that management can fulfill its obligation to report to shareholders and creditors.
2. *Price determination.* Information on competition and demand, as well as on costs, is necessary to enable prices to be set intelligently. In the cost area, what is usually required is information on the total cost (not just the production cost) of product units.
3. *Control of performance.* Performance is controlled by individual managers, and it is, therefore, usually necessary to divide the business into departments and sections and to assign to each manager responsibility for the performance in his own area. What is required, therefore, is information of those items of cost, revenue, and capital that are controllable by each manager. This is, of course, the field of budgetary control and standard costing.
4. *Decision-making.* Change is a basic fact of life in most businesses. Decisions must be made (perhaps not frequently) or such basic matters as expanding or contracting output and sales and introducing new products or eliminating old ones. The information required for such decisions is on differential costs, revenue, and capital. This is the area where variable, or marginal, costing is of value.

Whether price determination should be recognized as a distinct purpose may be debated. The reasons for doing so are that price decisions may be comparatively frequent, that in making such decisions accounting data by their nature are particularly inadequate, and that price determination is an area in which economists have long been interested, and for which there is, comparatively speaking, a large amount of empirical evidence.

The accounting information required for the first two purposes noted above is of product-unit costs, whereas for the other two purposes this is generally not so. The need for data for valuing stock and setting prices was undoubtedly the historical origin of many actual cost accounting systems; the requirement of data for controlling performance and making decisions has come to be recognized more recently by accountants.

Certainly no firm dividing line can be drawn between the types of data required for the objectives specified; for example, product-cost data for price determination can be considerably improved if they are analyzed into fixed and variable elements. If, however, data designed for one of the purposes described above are used for one of the other purposes, the results are generally likely to be radically unsatisfactory.

Undoubtedly the most difficult area of the four is decision-making. This is probably because of the great variety of decisions which confront a business organization over a substantial period of time. Anyone who reads the available literature on this topic is likely to become somewhat confused.[5] He will read of joint costs, past costs, opportunity costs, and so on; and the connections between them will be by no means obvious, so that he may be left with the impression that the different ideas are relevant to quite different needs. The main purpose of this paper is to attempt some clarification and unification in this area. Only two ideas, both related, are suggested to be of basic importance for decision-making; the other ideas are either synonymous with those two or subdivisions and examples of them.

MAJOR IDEAS

The two basic concepts are:

1. *Differential (or incremental) costs, revenue, profits, and capital.* When a change is proposed, the manager responsible for making the decision will need to ask, "What difference will it make?" The differential concept concentrates attention on the financial aspects of the business which will be altered as a result of the decision. The idea is particularly useful when some expansion of activity is contemplated, such as introducing a new product.
2. *Unavoidable costs and capital investment.* This idea concentrates on those items which will *not* be affected by the decision under consideration. It is particularly useful when some reduction in activity is contemplated, such as closing a factory.

The two ideas are closely related and are largely the converse of each

[5] The best treatments of the topic are probably in the books by Clark and Horngren already mentioned and in J. Dean, *Managerial Economics* (Englewood Cliffs, N.J.: Prentice-Hall, 1951), and in M. H. Spencer and L. Siegelman, *Managerial Economics: Decision-Making and Forward-Planning,* 3rd ed. (Homewood, Illinois: Richard D. Irwin, 1968).

other. To talk of nondifferential costs does not make sense, but to talk of unavoidable costs is perfectly intelligible. To speak of unavoidable (or avoidable) income or profit would sound very strange, but to speak of differential income or profit is quite sensible. When any decision is made and implemented, some of the financial features of the business will change, giving rise to differential costs, income, and so on; while some, the unavoidable costs and capital, will not change. Anyone who favored an even greater degree of simplification could claim that only the differential concept is of basic importance for decision-making. The subsidiary ideas relevant to decision-making will now be briefly described, and their connections with the two basic ideas noted.

PRIMARY SUBSIDIARY IDEAS

Marginal Cost and Revenue

This idea is virtually synonymous with the differential concept. Its origin is owed to economists, who tend to think of it in terms of the effects on total cost and revenue of expanding (or contracting) output and sales by a single unit; accountants tend to think in larger quantities. A further difference is that accountants tend to believe that, in the short-run at least, all costs can be divided into strictly fixed and strictly variable elements; in the long-run, when some fixed costs will change, accountants believe the relationship between cost and output will be broadly a linear one (implying constant marginal cost). Economists, on the other hand, assume that cost and output, generally speaking, will not be linearly related, either in the short-run or the long-run. The empirical evidence on this issue tends to support the assumptions of accountants.[6] So far as concepts are concerned, the marginal and differential ideas are so closely related that it is unnecessary for accountants to distinguish between them. This implies, of course, that accountants are to some extent indebted to economists for their most important notion in the field of accounting information for decision-making.

Opportunity Cost

The idea of opportunity cost also originated with economists, but accountants can be somewhat less grateful, as the concept can give rise

[6] On short-run cost behavior, see J. Johnston, *Statistical Cost Analysis* (New York: McGraw-Hill, 1960). The picture is less clear as regards long-run cost behavior, but the evidence is consistent with the assumption of constant marginal cost. See P. J. D. Wiles, *Price, Cost, and Output*, 2nd ed. (New York: Praeger, 1961).

to some confusion. The concept is for all practical purposes the same as the differential idea.[7] The opportunity cost of any course of action is the benefit which the best alternative course of action would have yielded. Sometimes the "best alternative" is interpreted as the best of the known alternatives, but more often economists interpret it as the best of all the possible alternatives, whether or not the decision-maker knows of its existence. Suppose a manufacturer has a choice between two new products: product X will add \$18,000 a year to his profits, and product Y will yield \$15,000. The manufacturer can note the difference between the two, and conclude that the gain from X is \$3,000 a year, on the grounds that by adopting X he is sacrificing the \$15,000 a year which Y would have given him, and that this amount is therefore a hidden (or opportunity) cost of X. In other words, the costs of X are not what they would be if it were considered purely in isolation but will include the benefits foregone by not adopting Y. The main use of the term "opportunity cost" is, thus, to refer to items which are not normally considered accounting costs at all. Sometimes a contrast is drawn between opportunity and "out-of-pocket" or "outlay" costs.

To use an everyday illustration, suppose that a person is trying to decide whether to use public transportation or to buy a car; if the latter, he can buy either a new or a second-hand car. Owning a car will tie up his capital, and the investment will be greater for a new car than for a second-hand one (it will be assumed that he has sufficient money available to buy a new car). If he does not buy a car, his capital can be invested in some other way and so earn a return; if he buys a second-hand car, part of his capital can be used to earn interest. Interest should be considered in arriving at a decision. The interest earnings foregone by owning a car can be treated as an opportunity cost and added to the out-of-pocket costs; equally, of course, interest actually earned may be deducted from the out-of-pocket costs. Either method, as illustrated in Figure 1, will show the same difference between the alternatives, as may be seen from the example below (this assumes a second-hand car costing \$1,800, a new car costing \$3,000, interest earnings of 5 percent a year, and the same annual mileage under each alternative).

[7] See J. R. Gould, "The Economist's Cost Concept and Business Problems," in W. T. Baxter and S. Davidson, eds., *Studies in Accounting Theory* (London: Sweet and Maxwell, 1962); and L. Amey, "On Opportunity Cost and Decision-Making," *Accountancy* 79 (July 1968): 442–55.

Figure 1.

	Public Transportation		Second-hand Car		New Car	
Opportunity cost approach						
Capital invested	–0–		$1,800	(Price)	$3,000	(Price)
Annual cost excluding interest	$ 340		$ 370		$ 350	
PLUS interest *cost*	–0–		90	(5% on $1,800)	150	(5% on $3,000)
Total annual cost	$ 340		$ 460		$ 500	
Differential cost		+$120		+$40		
Differential approach						
Interest-earning capital	$3,000		$1,200		–0–	
Annual cost excluding interest	$ 340		$ 370		$ 350	
LESS interest *earnings*	150	(5% on $3,000)	60	(5% on $1,200)	–0–	
Total annual cost	$ 190		$ 310		$ 350	
Differential cost		+$120		+$40		

From what has been said, the equivalence of the opportunity and differential ideas should be obvious. The opportunity cost doctrine says, essentially, "Be careful to consider all the financial gains and losses from alternative courses of action." The doctrine is, of course, an admirable one, but it does not necessarily involve the opportunity cost procedure of treating as a "cost" the income which will be sacrificed by following a particular course of action. The procedure is, however, sometimes a convenient one to use. The income can be treated as income by means of an explicit computation of the gains (or losses) from each of the alternatives open to the decision-maker.

Fixed Costs

The distinction between fixed and variable costs is the basis of variable or marginal costing. The only reason for separating fixed costs is that they are often unavoidable. Much of the controversy that surrounds variable costing, however, is because fixed costs are not always unavoidable. Any fixed cost will probably be unavoidable in the short-run; in the short-run, therefore, differential cost will be variable cost only (assuming that all costs can be divided into strictly variable and completely fixed elements, as they probably can). In the long-run, however, it must be

recognized that fixed costs will often change. This point is discussed further in the next section.

Long-run Cost Behavior

The distinction between long-run and short-run cost behavior is most useful in conjuction with the idea of fixed costs. The short-run may be conveniently, if crudely, defined as up to one year. In the short-run, a company's capacity to produce and sell cannot be altered. To acquire additional plant, for example, may take as long as a year: the proposal must be debated, alternative types of equipment considered, possibly new capital must be raised, an order must be placed and delivery awaited, and the plant must be installed and tested. Not all these steps will be necessary if existing plant is retired, but the appraisal of the proposal and the dismantling and sale of the equipment will probably take longer than the corresponding steps in acquiring new plant. Engaging supervisory and managerial staff may take time, as skills of the type required may be in short supply; discharging such staff may involve redundancy payments equal to a year's salary. Only in the long-run, therefore, can a company's capacity to produce and sell be changed. The fixed costs likely to change in the long-run are those which can be directly attributed to the segment of the business to be affected by the change.

Indirect Costs

The distinction between direct and indirect costs is one of the oldest in cost accounting. The application of this idea which is of most value for decision-making purposes is that between items of cost which can be identified wholly with a particular department (or division) of a company or with a particular product, and costs which are common to two or more departments or products, which may be called "departmental overhead" or "cost center overhead." The related distinction between costs which can be attributed directly to a particular *unit* of output, and costs which are common to a number of units ("product overhead" or "cost unit overhead") is much less useful. In the following discussion, the distinction will be used in the former sense. Shillinglaw[8]

[8] G. Shillinglaw, "The Concept of Attributable Cost," *Journal of Accounting Research* 1 (Spring 1963): 73–85, reprinted in D. Solomons (ed.) *Studies in Cost Analysis,* 2nd ed. (Homewood, Ill.: Richard D. Irwin, 1968); and G. Shillinglaw, *Cost Accounting Analysis and Control,* 2nd ed. (Homewood, Ill.: Richard D. Irwin, 1967).

prefers the term "attributable cost" to "direct cost"; other authors prefer "traceable" or "separable." Whatever term is used, the distinction being drawn is the well-established and familiar one between departmental direct cost and departmental overhead, and a change of terminology would not seem to be justified.[9]

There is little point for decision-making, as opposed to control, purposes in dividing variable costs into direct and indirect categories. There is, however, considerable merit in analyzing fixed costs in this way. The following type of analysis is a useful one in respect of divisions (or departments), or products:

Sales	
LESS Variable costs	———
Contribution (1)	
LESS Direct fixed costs	———
Contribution (2)	
LESS Indirect fixed costs	———
Profit	═══

This analysis can be applied to a single division, even if it produces more than one product (the direct costs being in that case those identifiable with the division), or to a single product even if it is produced by more than one division (the direct costs then being those identifiable with the product). For simplicity, a single division responsible for one or more products will be assumed.

Contribution (1), which is the normal contribution figure calculated in variable costing, is useful to predict the effects on profit of changes in sales and production volume within the limits of a company's existing production and sales capacity. Contribution (2) is useful for predicting the effects on profit of changes which necessitate an expansion or contraction of capacity. Contribution (1) is sometimes called the variable contribution or variable margin. Contribution (2) could be called the direct contribution or direct margin, except that it is a contribution, not to all indirect costs, but only to indirect fixed costs and to profit.

The direct fixed costs of a division cannot, of course, be expected to change in strict proportion to the change in output which results from a change in capacity: it is not possible to buy or sell half of a machine or to buy a machine with precisely the capacity required so that there will be no underutilization. Direct fixed costs should, however, change approximately in proportion. If the division were closed, the direct fixed

[9] The established terminology is used in H. Bierman, *Topics in Cost Accounting and Decisions* (New York: McGraw-Hill, 1963).

costs could be expected, in the long-run, to disappear; if the output and capacity of the division were expanded or contracted by one-half, the direct fixed costs could be expected, in the long-run, to increase or decrease by approximately one-half. The indirect fixed costs, on the other hand, could be expected not to be materially affected by even quite substantial changes within the division; they will in most cases be the cost of facilities shared by all the divisions. The indirect fixed costs need not, of course, be apportioned over the divisions.

The distinction between direct and indirect fixed costs renders unnecessary the distinction that is sometimes made between closure and abandonment costs. If the closure is only temporary, contribution (1) will be lost; if it is permanent, then, in the long-run, contribution (2) only will be lost. The model described above, naturally, cannot be applied without adaptation to all real-life situations. In particular, given a sufficiently substantial change in a firm's capacity, possibly no cost would be unaffected.

Common Costs

A clear distinction needs to be drawn between common costs and joint costs. "Common" is usually synonymous with "indirect," and what has been said above needs no modification. A clear distinction should be drawn between direct and indirect (or common) fixed costs; indirect *variable* costs, however, usually present no problem. The direct variable costs of a division will vary with the output of the division; but then, as a general rule, so will the indirect variable costs. Assume a power house supplying electricity, steam, or compressed air to a number of divisions; the variable costs of the power will be primarily the fuel used to produce it (for example, coal or oil). If the output of one division expands or contracts (the output of the other divisions remaining constant), variable power costs will change in proportion, despite the fact that variable power costs in total are common to a number of divisions. Variable indirect costs usually only create problems in a joint-product situation.

A type of common cost that is of no theoretical importance, but which has some practical utility, is one which is common to the various alternatives being considered when a change has been proposed. In such cases it will make no difference, in comparing the possibilities, whether the common cost is included or excluded. Assume that two alternatives are being considered which (among other things) will involve higher labor costs; either the total approach or the incremental approach may be used as shown in Figure 2.

Figure 2.

	Present situation	Alternative 1	Alternative 2
Total approach			
Total wages per year	\$20,000	\$25,000	\$32,000
Incremental approach			
Additional wages per year		+ \$ 5,000	+ \$12,000

There is no difference in comparing the present situation with either alternative (or the alternatives with each other) if costs common to all (wages of \$20,000) are included or excluded. This principle is of general applicability: it is possible either to compute a firm's total profit under each of the available alternatives and compare them with its present profit, or to compute only the differences in each item which goes to make up profit. Which approach is used is a matter of convenience. Sometimes the total approach is easier, particularly where there are several alternatives; sometimes the incremental approach is easier, particularly where there is only one alternative.[10] Care must be taken, however, to use either one approach or the other, and not to mix them; it would be a mistake, for example, to relate total profit only to incremental capital or to relate incremental profit to total capital.

Joint Costs

The most familiar situation where the joint-cost problem arises is where two or more products must be produced together, often in proportions which cannot be altered. An example often quoted to illustrate this situation is a meat-processing plant. If such a plant is processing beef-cattle, for example, it cannot choose to produce only meat or only hides or only tallow, but must produce all of them.[11] The principles described in the previous sections still apply in a joint-product situation, *provided* that the joint products are considered together, as if they were one product.[12] Apart from that, no modification is needed. There will, of course, be no direct fixed costs so far as any one of the joint products is concerned. Variable costs, however, do create a problem in this type of situation in a way which they do not in a common cost situation. Even

---

[10] Another illustration of this point is contained in R. C. Skinner, "Plant Replacement and Book Values," *Accountancy* 80 (March 1969): 172–77.

[11] The distinction between main products and by-products is, of course, of no value for decision-making.

[12] Even if it is possible to vary the proportions of the joint products, what is relevant for decision-making is the effect on the *total* cost of the joint products of changing the proportions.

assuming that variable costs can be apportioned among the joint products, this information will be of no use for decision-making. Normally the variable cost of a product is helpful in predicting the effects on the firm's total costs in the short-run if output of that one product is expanded or contracted; in a joint-product situation, it is not possible to change the output of just one product. The variable costs of all the joint products *together,* however, can be employed in the normal way; and in doing so it is not necessary to distinguish between variable costs directly attributable to one set of joint products, and variable costs, such as power, common to several sets.

It is worth noting that a kind of joint-cost situation can exist in connection with a single product, where one division or department performs some operations or processes on it and another division does others. If one division were eliminated, the product, in its existing form, would disappear. It might be possible, of course, to sell it in an incompletely processed state, to perform a different process on it, or to subcontract the existing processing work. Whichever procedure was followed, the costs relating to the product would change. This point is worth remembering when viewing the activities of a division. One must consider not only the products for which the division is solely responsible, but also any product for which it is jointly responsible with other divisions. The analysis described earlier can be used in this kind of situation. What will be required is an analysis of costs and revenue by products, as well as, or in place of, an analysis by divisions.

Past (or Sunk) Costs

Past costs are unavoidable, simply because they are past. Only future costs can be differential costs. It is often possible, for example, to recoup part of the money spent to acquire a machine by selling it, but what is relevant here is the machine's sale value (future revenue) and not what was paid for it in the past. To use a different example: suppose that a company has some obsolete stock which will never be used, and which can only be sold as scrap for $1 a unit; it cost $4 a unit to produce of which $2 was variable cost. The stock should obviously be sold at $1 a unit, thus releasing capital and storage space; the loss on sale is unavoidable, whether the company acknowledges it or not, since it has already occurred. Since past costs are common to all the alternatives open to a firm, the same answer will be reached irrespective of whether the common costs are included or excluded in comparing the alternatives. If the obsolete stock consists of one hundred units, as illustrated in Figure 3.

Figure 3.

Total approach	*Hold stock*	*Sell stock*	*Gain*
Sales revenue	-0-	$100 (100 x $1)	
Cost	$400 (100 x $4)	$400 (100 x $4)	
Profit/(Loss)	(400)	(300)	$100
Incremental approach			
Additional sales revenue			$100 (100 x $1)
Additional costs			-0-
Additional profit			100

Both approaches inevitably reveal the same gain from disposing of the stock. The past cost of $400, being unavoidable, is common to all the the possibilities open to the firm.

SECONDARY SUBSIDIARY IDEAS

The ideas discussed above, while being variations of the two basic concepts of differential costs and unavoidable costs, are all of substantial significance for decision-making purposes. The following ideas now to be discussed are of lesser significance.

Discretionary or Managed Costs

Discretionary costs are commonly contrasted with committed costs. The purpose of the distinction is to divide fixed costs into two categories according to their degree of avoidability. Committed costs are the costs of the firm's existing production and sales capacity, such as depreciation, insurance, rent, rates, and the salaries of key personnel. Discretionary costs are those which are not essential to current activities, such as research and development, advertising, and employee training. The distinction, in the author's opinion, embodies a somewhat naive view of the costs normally considered discretionary. If a firm has its own research department (whether for product or market research), or its own training scheme, the costs of research and training will consist mainly of staff salaries, and plant and equipment costs; the staff will often be highly qualified, with high status. It will probably be just as difficult to reduce the level of such costs in the short-run as it would be to reduce fixed production costs, and the adverse effects of doing so in the long-run could be even more severe. Concerning advertising, if a firm has a contract with an outside agency, it may not be able to reduce advertising costs significantly in the short-run without a penalty,

and a reduction might lead, even in the short-run, to a loss of variable contribution greater than the expenditure avoided.

A particular item of cost can be classified as discretionary or committed only by deciding whether or not it is avoidable. But in that case, the distinction is of little value, since the point of such distinctions is to indicate types of cost which are usually avoidable (or unavoidable) in the short-run or the long-run. If it is necessary to decide first whether a particular cost is avoidable or not before it can be classified as committed or discretionary, such a classification is valueless.[13] The truth of the matter would seem to be that the amount of money which must be spent on such activities as research and advertising to achieve the firm's objectives is very much a matter of judgment on the part of management (the expenditure is discretionary in that sense). But once a particular program of activities has been decided, it may be just as difficult to change the program significantly as it would be to change production activities. Management has discretion at some time or another in respect of *all* its activities, but it then necessarily proceeds to commit itself to what it considers the best courses of action.

Postponable Costs

Postponable costs, such as maintenance, are usually contrasted with urgent costs, such as the wages of production personnel. The object is to classify costs according to degrees of avoidability in the short-run. This classification is similar to the last and is subject to similar criticisms. If a firm has its own maintenance staff, for example, reducing maintenance work is likely to mean, in the main, merely more idle time for maintenance employees; the reduction could well lead, even in the short-run, to greater costs or loss of contribution, through machine breakdowns, than the cost immediately saved. It is necessary to decide first whether a particular item of cost is avoidable in the short-run before it can be classified as postponable; as a result, the distinction is of little value.

Conditional Costs

As mentioned at the beginning of this paper, it is now a familiar argument that the cost of anything depends on the purpose for which

[13] Horngren, somewhat surprisingly, makes considerable use of the distinction, but comments about discretionary cost: "This category of cost is difficult to isolate and is subjective to a large degree." C. T. Horngren, *Cost Accounting: A Managerial Emphasis,* 2nd ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1967), p. 245.

the cost information is required. It is a less familiar viewpoint that the cost of (or gain from) any action depends also on the circumstances of the decision-maker. To revert to the example of obsolete stock used earlier although it is future cost, rather than past cost, which is relevant to any decision, in this case the replacement cost of the stock is just as irrelevant as its past cost since the stock will not be replaced.

To use a less obvious example, assume that a work-study investigation is conducted on a product which reduces its machining time, and so reduces one of its variable production costs, such as power. If the firm has surplus capacity, the gain from the change will be the cost-saving per unit times the number of units produced and sold. If, however, the company is working at full capacity, and the time-saving enables more units to be produced and sold, the gain is not only the cost-saving on the existing output, but in addition the contribution (sales less variable costs at the new level) from the additional units. In short, change always involves a movement from an existing situation, and decisions always involve a choice, as a person can always choose to remain in his existing situation. In order to provide useful accounting information for decision-making, it is necessary to be familiar with the present situation and with the available alternatives, as well as with the purpose for which the information is required.

SUMMARY

For decision-making, the idea of basic importance is that of differential costs, revenue and capital, or conversely, unavoidable costs and capital. Marginal costs and revenue, and opportunity costs, are virtually the same as differential costs and revenue. All variable costs are likely to be avoidable in the short-run. Fixed costs, however, are usually unavoidable in the short-run, and indirect fixed costs are unavoidable even in the long-run. Common costs are virtually the same as indirect costs. Joint products must be considered jointly; but if that is done, the same principles apply to them as to independent products. Past costs are always unavoidable. The ideas of discretionary costs and postponable costs are, it is suggested, too vague to be of much use. A new description, "conditional costs," is proposed to acknowledge the fact that "the" cost of anything depends not only on the purposes, but also on the circumstances, of the decision-maker.[14]

---

[14] I am grateful to two New Zealand colleagues, Professor A. M. Bourn of Canterbury University, Christchurch, and Professor T. K. Cowan, of Otago University, Dunedin, for helpful comments on the original draft of this paper.

International Accounting: Varying Definitions

THOMAS R. WEIRICH,* CLARENCE G. AVERY,†
AND HENRY R. ANDERSON‡

International accounting is a challenging and rapidly developing field of study within the accounting profession. Since accounting is the language of business and the volume of international investment, credit, and trade is increasing annually, the term "international accounting" is appearing more frequently in accounting literature.

What does international accounting mean? Webster's dictionary defines international as "affecting or involving two or more nations."[1]

* Thomas R. Weirich is a faculty assistant teaching accounting at Northern Illinois University, DeKalb. He received his B.S. degree in accounting from Northern and is a candidate for the master's degree in business administration there. He will be an instructor of accountancy in the fall at Central Michigan University, Mount Pleasant, He plans to teach in Australia in the 1971–72 school year. Mr. Weirich is a member of Beta Gamma Sigma and Beta Alpha Psi.

† Clarence G. Avery is Professor of Accountancy and Head of the Department at Northern Illinois University, DeKalb. He received his B.S. degree in accounting from the University of Omaha, Omaha, Nebraska. He completed requirements for a Master of Science in Accountancy at the University of Illinois in 1956 and received a Ph.D. in accountancy in 1959. He is a CPA in the states of Illinois and Ohio.

‡ Henry R. Anderson is Assistant Professor of Accountancy at Northern Illinois University, DeKalb. He received his B.A. degree in accounting from Augustana College, Rock Island, Illinois, his M.S. degree in business administration from Northern Illinois University, and is a candidate for a Ph.D. in accountancy from the University of Missouri, Columbia. Mr. Anderson is a CPA in the state of Illinois. He has been an instructor at Northern Illinois University and the University of Missouri, Columbia, and is assistant director of the Cost Accounting Standards Board in Washington, D.C., while on leave from Northern Illinois University.

[1] *Webster's Seventh New Collegiate Dictionary* (Springfield, Mass.: G. & C. Merriam Company, 1963), p. 442.

Accounting has been defined as "the process of identifying, measuring, and communicating economic information to permit informed judgments and decisions by users of the information."[2] Therefore, does "international accounting" mean the process of identifying, measuring, and communicating economic information involving two or more nations?

The term "international accounting" has different meanings according to current accounting literature. Some authors consider that international accounting includes all concepts and procedures of each country, while others consider international accounting to be a set of broad concepts and standards that can be adopted by all countries. To date, a uniformly acceptable definition of the term has not been formulated and accounting literature does not provide an explicit definition of the term "international accounting."

The purpose of this article is to (1) report research on some of the major concepts of the term international accounting; (2) survey various periodicals on this topic to determine if the authors have stated explicitly a definition for "international accounting" and, if not, attempt to arrive deductively at a definition from the periodicals; and (3) based on an analysis of these articles, draw a conclusion as to the meaning of the term "international accounting."

EXISTING MAJOR CONCEPTS

According to Professor Irving L. Fantl, three major concepts are discussed in relation to the international accounting topic. International accounting can be considered to be one of the following concepts: (1) a universal system; (2) a descriptive and informative approach covering all the methods and standards of all countries; or (3) accounting practices of foreign subsidiaries and parent companies.[3] The authors have renamed these concepts (1) world accounting, (2) international accounting, and (3) accounting for parent company and foreign subsidiary, respectively.

World Accounting

Within the framework of this concept, international accounting is considered to be a universal system that could be adopted in all coun-

[2] *A Statement of Basic Accounting Theory* (Evanston, Ill., American Accounting Association, 1966), p. 1.

[3] Irving L. Fantl, "The Dilemma of International Accounting," *The New Jersey CPA* 39 (Spring 1968): 3–8.

tries. A world-wide set of generally accepted accounting principles (GAAP), such as the set maintained in the United States, would be established. Practices and principles would be developed which were applicable to all countries. This concept would be the ultimate goal of an international accounting system.

International Accounting

A second major concept of the term international accounting involves a descriptive and informative approach. Under this concept, international accounting includes *all* the varieties of principles, methods and standards of accounting of *all* countries. This concept includes a set of generally accepted accounting principles established for each country, thereby requiring the accountant to be multiple principle conscious when studying international accounting. In addition to understanding the accounting principles and their effects on financial reporting in a particular country, the accountant would be required to possess a knowledge of the accounting principles of that foreign country and also their effects on financial reporting. No universal or perfect set of principles would be expected to be established. A collection of all principles, methods and standards of all countries would be considered as the international accounting system. These variations result because of differing geographic, social, economic, political, and legal influences.

Accounting for Foreign Subsidiaries

The third major concept that may be applied to "international accounting" refers to the accounting practices of a parent company and its foreign subsidiary. A reference to a particular country or domicile is needed under this concept for effective international financial reporting. The accountant is concerned mainly with the translation and adjustment of the subsidiary's financial statements. Different accounting problems arise and different accounting principles are to be followed depending upon which country is used as a reference for translation and adjustment purposes.

Evaluation of Concepts

Within the framework of the first concept, world accounting, a question often raised is: Can an international accounting system function effectively without a set of international accounting principles? Some authors believe that a broad set of accounting principles should be established which would be accepted universally so that financial statements

would be more useful and understandable on an international basis. As long as the accounting principles vary from country to country, however, there cannot be complete international understanding. The possibility of an international or universal system of accounting principles adopted by all countries is rather doubtful because of the differing legal, political, and social forces among various countries.

The second concept, international accounting, includes all the different accounting principles of each country. This concept makes the accountant aware that there are different principles from those used in the United States. As a result, the accountant would be required to be multiple principle conscious. This would give him a better understanding of the relationships and effects of one country's principles and practices as compared or contrasted with another country. The accountant would be concerned with the effect of the relationship of the different accounting transactions on the accounting systems of the various countries.

The most apparent difficulties of the third concept, accounting for foreign subsidiary, arise from the different accounting practices existing in the specific country in which the subsidiary is located. The problem of adjusting financial statements from the subsidiary's currency base to that of the parent company is also an area of concern. Current literature reveals that this concept of international accounting is too shallow and, therefore, unacceptable.

SURVEY OF APPLICABLE LITERATURE

In addition to examining the three concepts mentioned in the Fantl article, an analysis was made of several articles on international accounting. A personal interview was conducted with Professor Vernon K. Zimmerman, director of the international accounting center at the University of Illinois at Urbana-Champaign. An extensive survey of current literature revealed several articles relevant to this study. They were selected because they either discussed international accounting in general terms or used the term "international accounting." The articles were examined to determine if the term was explicity defined. If it was not defined, the implied definition was drawn deductively from the article. The definitions were then categorized according to one of the three major concepts mentioned in the introduction. The results of the survey and the analysis of the articles are presented in the following table.

Table 1.

Comparative Survey of International Accounting Concepts.

Article	*Author*	*Explicit Definition*	*Deduced Definition*	*Categorized Concept*		
				World Accounting	*International Accounting*	*Accounting for Foreign Subsidiary*
"International Accounting Practices"	Kollaritsch		X		X	
Readings in International Accounting	Mueller, Berg, Walker	X			X	
"International Acctg — A Challenge for Ingenuity"	Bowles		X			X
"International Accounting"	(Editorial) The Journal of Accountancy		X	X		
"International Standards of Accounting and Auditing"	Jennings		X	X		
"Whys & Hows of International Accounting"	Mueller		X		X	
"Some Observations on World Accounting"	Mahon		X		X	
Personal Interview with Professor Zimmerman		X		X		

From the table, international accounting was referred to as a set of accounting practices of foreign subsidiary and parent companies only once in the literature reviewed. This concept, then, is only of minor importance in explaining the term international accounting. However, the remaining two concepts, one that defines international accounting

as a universal system that could be adopted by all countries (three articles), and the other that defines international accounting as the set of *all* the varieties of principles, methods, and standards of accounting of *all* countries (four articles), were expressed frequently in the literature reviewed. The following paragraphs contain summaries of the articles analyzed.

Kollaritsch

Although the term international accounting was not defined explicitly in Professor Kollaritsch's article, he implicity considered it to include all of the various accounting practices and procedures of all countries. The article stated that both historical and modern accounting practices are presently in use among various countires. The article analyzes some of the unique accounting practices that exist in foreign countries, including uniform accounting practices in Germany and France and price-level accounting in Austria. This deduced definition, therefore, would be categorized under the second concept (international accounting) since it presents international accounting as including the different accounting methods and procedures of various countries.[4]

Berg, Mueller, and Walker

In the text, *Readings in International Accounting,* professors Berg, Mueller, and Walker defined the term international accounting as follows: "International accounting, as we use the phrase, (1) is concerned with international implications of the various national accounting thoughts and practices; and (2) measures and communicates, in financial and economic terms, international business events and transactions."[5] The text is comprised of articles on financial reporting problems, patterns of accounting principles and practices on an international basis. From this explicit definition, the term would be categorized under concept two (international accounting) because it also considers all the various accounting thoughts and practices.

Bowles

International accounting, according to Bowles, is considered to be accounting problems and practices of multinational operations. The term international accounting was drawn deductively to mean accounting for foreign subsidiaries. Accounting problems in a multinational

[4] Felix P. Kollaritsch, "International Accounting Practices," *Accounting Review* 40 (April 1965): 382–85.

[5] Kenneth B. Berg, Gerhard G. Mueller, Lauren M. Walker, *Readings in International Accounting* (Boston: Houghton Mifflin, 1969), p. 2.

operation sometimes differ greatly from those encountered in the United States. Some of the problems cited were: (1) there are many different measuring units such as sales units (gallons, liters) and monetary units (currencies); and (2) different depreciation rates and tax incentives between the various countries cause problems in understanding.[6] Mr. Bowles also mentioned that interpretation and translation problems of financial statements exist between the parent company and the foreign subsidiary. This deduced definition would, therefore, be categorized under concept three (accounting for foreign subsidiary).

The Journal of Accountancy Editorial

This article emphasized the need for broad standards of accounting and auditing that could be acceptable to all nations. Difficulty arises in interpreting financial statements of firms in foreign countries because of the variety of accounting and auditing principles and procedures that are now in existence.[7] International accounting, again, was not defined explicitly in the article. Therefore, the term was deductively drawn to mean a set of broad standards and principles of accounting and auditing which can be accepted internationally. This definition would be classified under concept one (world accounting) because the main point of the article was the establishment of broad standards of accounting and auditing that could be accepted by all countries.

Jennings

In Mr. Jennings' article, the term international accounting was defined implicitly as a set of broad standards of accounting and auditing which could be accepted internationally. Mr. Jennings stated, "The crucial standards of quality of professional practice do in fact exist and are essentially uniform . . . and that any differences which exist are technical and, in many instances, superficial."[8] In addition, he brought out the fact that the main desire of international accounting conferences was to standardize the accounting and auditing practices so that they would be acceptable. Mr. Jennings suggested that research programs might provide the beginning for the development of international standards of accounting and auditing. This deduced definition was categorized under

[6] C. C. Bowles, "International Accounting: A Challenge for Ingenuity," *The International Journal of Accounting Education and Research* 4 (Fall 1968): 83–97.

[7] "International Accounting," *The Journal of Accountancy* 119 (February 1965): 32–33.

[8] Alvin K. Jennings, "International Standards of Accounting and Auditing," *The Journal of Accountancy* 14 (September 1962): 36–41.

concept one (world accounting) because it considered international accounting to be a set of broad standards of accounting and auditing.

Mueller

Gerhard G. Mueller stated that "international accounting is concerned with interrelationships of accounting among countries."[9] This statement means that there are differences in accounting practices and procedures that exist among countries and these differences and their interrelationships are subject areas in the study of international accounting. The article illustrates some of the more apparent differences that exist; that is, the translation of foreign-currency amounts and the differences in handling depreciation. Therefore, international accounting is concerned with the differences in accounting practices and procedures among countries. This concept implies the definitional area under concept two (international accounting).

Mahon

The article by James J. Mahon cautioned that there are differences in accounting principles and techniques and reporting practices among different countries. However, Mr. Mahon said that these differences should be expected. He also pointed out that "there is basically [one] common accounting language."[10] Double-entry bookkeeping and the balance sheet and income statement are still the basic tools of accounting in all countries. The differences in accepted accounting principles lead to material differences in net income, working capital, and other pertinent information significant to investors and creditors. These differences arise because the economic, business, and governmental aims of different countries differ even among the highly developed nations. The article goes on to explain some country-by-country differences in accounting principles and auditing standards that cause these material differences in information to investors and creditors. Mr. Mahon did suggest that improved accounting principles and auditing standards were needed to overcome these differences. International accounting, as implied within this article, would mean all the various accounting principles and auditing practices of all countries and, therefore, would be categorized under concept two (international accounting).

---

[9] Gerhard G. Mueller, "Whys and Hows of International Accounting," *Accounting Review* 40 (April 1965): 386–94.

[10] James J. Mahon, "Some Observations on World Accounting," *The Journal of Accountancy* 119 (January 1965): 33–37.

Zimmerman

In a personal interview with Professor Vernon K. Zimmerman, he stated that "international accounting could be considered as an abstraction of the highest order of accounting." This definition would include universal theories which form a macro-accounting structure apart from procedural level practices. There would be no boundary limits on a national basis. The theories would be applicable to any phase of accounting in any country. For these reasons, international accounting was categorized under concept one (world accounting). Professor Zimmerman concluded the discussion by saying that, at present, there was no one internationally accepted definition of the term international accounting.

CONCLUSION

Two major conclusions can be drawn from this research effort. First, at the present time, there is no one internationally accepted definition of the term "international accounting." If we as accountants are striving toward the goal of improving the development of accounting on an international basis, then it is only logical that we all start from the same point, the development of one internationally accepted definition of the term international accounting. And secondly, the formulation of a definition of international accounting is very difficult. However, if accountants are going to use the term "international accounting," then we should take upon ourselves the responsibility of arriving at a definition which has universal agreement and acceptability.

A solution to these problems, recommended by the authors, would be to use different terms to describe the various concepts involved in the area of international accounting. When discussing a universal system of accounting adaptable for all countries, we should use the term "world accounting." When discussing the concept which includes all the varieties of principles, methods, and standards of accounting of all countries, the term "international accounting" should be used. Thirdly, when discussing the accounting for parent and subsidiary companies, we should employ the term "parent and subsidiary accounting." Until a more acceptable definition can be derived, it is the belief of the authors that this approach would be more meaningful to all nations concerned. With the development of an acceptable definition for the term "international accounting," research into the area would be facilitated.

The Birth of an Accounting Profession: The Ethiopian Experience

GARDNER JONES* AND JOHANNES KINFU†

Seldom do observers have the opportunity to be present at the emergence of a profession. But during the next decade members of the accounting profession in economically advanced countries may have the opportunity at least to observe, if not to render the service of midwifery, at the genesis of a profession of accountancy in one or more of the developing countries. A case in point is Ethiopia, which now has reached the point in its commercial, legal, and educational development where the circumstances are conducive to the creation of a class of professional accountants. In this article, we shall present the historical circumstances leading to the present development of accountancy in Ethiopia, its current status, and the changes that are needed in institutions, laws, and customs to bring into being a full-fledged accounting profession in that country.

HISTORICAL BACKGROUND

Although Ethiopia is an ancient kingdom with a long commercial

* Dr. Gardner Jones, CPA, is Professor of Accounting and Chairman, Department of Accounting and Finance at Michigan State University. He is a graduate of the University of Michigan and Louisiana State University. He has served on committees of the American Accounting Association, Michigan Association of CPA's, and is now a National Director of the National Association of Accountants. He has published in *The Accounting Review, Management Accounting,* and other professional journals.

† Dr. Johannes Kinfu is Chairman of the Department of Accounting in the College of Business Administration, Haile Selassie I University, Addis Ababa. He is a graduate of the University of Utah and received his doctorate from Michigan State University in 1970.

history together with ancient royal rules and customs relating to the conduct of commerce, not until 1960 was a commercial code promulgated. This code prescribes the corporate law of Ethiopia. In general, the code's provisions concerning the type of corporations that may be formed, their legal structures, and contractual obligations are similar to the corporate law of some Western countries. They are patterned on the French and Swiss codes, with some British and Italian influence.

The economic advisers to H.I.M. Haile Selassie I viewed business corporations as important agencies in national economic development and in accumulating capital and undertaking risk; they also realized that some regularization of the processes of corporate formation and governmental monitoring of these corporations was necessary. The need for a stock exchange was also foreseen so that an active capital market might develop as a focal point for attracting capital for economic development.

Because few corporations existed in 1960, the government had to sponsor the establishment of corporations in desired industries, subscribing a portion of the capital with the intention of eventual divestment to private owners. The divestment of these government or government agency shares to private ownerships is now under way.

Gradual progress has been made in corporate formation, both with and without government investment. In 1960, the nucleus of an indigenous stock exchange began with the opening of a Share Exchange Department under the aegis of the State Bank of Ethiopia.[1] By 1965 the share market expanded and outgrew the initial facilities and prompted the formation of a Share Dealing Group to supervise and regulate the share market and its future development. Thus the Share Dealing Group, under the auspices of the National Bank, for the first time provided an institution to buy and sell shares of Ethiopian corporations. The number of Ethiopian corporations, in comparison with more advanced Western nations, is still not large. What is significant, however, is that the institutional environment has been created for the growth of a capital market.

For investors to rely on the performance and potential of corpora-

[1] The State Bank was a government-owned institution which performed central banking functions in addition to conducting most of the country's commercial banking business between its founding in 1942 and dissolution in 1963. In 1963 the central banking activities and commercial banking business were separated with the creation of the National Bank of Ethiopia and the Commercial Bank of Ethiopia.

tions, some independent assurance of the representations of those firms must exist. To this end, the commercial code provides that auditors must express an opinion on the accounts and on the report of the Board of Directors. Regrettably, the code does not provide a definition of an auditor, nor does it list the qualifications required of them. As in the Italian and French law, the Ethiopian code does eliminate certain interested parties as possible auditors, but it does not identify the qualifications necessary to be appointed as an auditor. Thus there is a serious flaw in the credibility of reporting by Ethiopian corporations. Fortunately, it is a remediable flaw, as we shall note later.

CURRENT STATUS

There is no self-governing accounting profession in Ethiopia, in the sense of a self-policing association or even a governmental regulatory board. There is no body of accounting principles, accounting theory, or statement of ethical or auditing standards; nor is there an admission examination required for certification as a public accountant.

There exists in Ethiopia, however, the nucleus of an accounting profession. There are a number of accountants and accounting firms who might qualify, in greater or lesser degree, under certification rules similar to those in the United States or England. For example, there are branches of English and other foreign accounting firms whose principals generally are qualified in their home countries. In addition, there are a few Ethiopians who have become certified abroad and a group of Italian accountants who have satisfied the Italian criteria for registration as *Ragionieri*. Altogether, the nucleus of an accounting profession is composed of five to eight firms and twenty to thirty individuals, according to a study conducted in Ethiopia by Paul Cone and Johannes Kinfu (see Table 1).

The commercial code requires audited financial records of all share companies (corporations) and all private limited companies. In order to obtain the degree of creditibility in reporting that meets their expectations, foreign-owned (British, American) businesses operating in Ethiopia and most of the large Ethiopian corporations engage auditors from the Ethiopian branches of British auditing firms or make use of those few local auditing firms whose opinions are considered reliable. Some corporations, however, hire any self-designated "auditor," simply to comply with the commercial code's requirements.

Table 1.

Persons or Firms Currently Practicing "Public Accounting" in Ethiopia*

Origin, Nationality, and "Qualifications"	*Names*	*Type of Work Performed*
Public accounting firms with home office outside Ethiopia — "qualified"	1. Price Waterhouse Peat & Company, Addis Ababa	Auditing and other accounting services
	2. Russel & Company, Addis Ababa	Auditing and other accounting services
	3. Nawar & Company, Addis Ababa	Auditing and other accounting services
	4. Mann-Judd & Company, Addis Ababa	Auditing and other accounting services
	5. Whinney & Murray & Company, Addis Ababa	Auditing and other accounting services
Public accounting firm with home office in Ethiopia, headed by foreigner — "qualified"	Solele and Company, Addis Ababa	Auditing and other accounting services
Non-Ethiopians — "qualifications" not known	Nicolas Thomaides, Addis Ababa	Not specifically known
	Franco Guiseppe, Addis Ababa	" " "
	Others	
Other firms headed by Italians, mostly in Asmara — with qualifications known as "Ragionieri"	Giovanni Benuzi	Not specifically known
	Roberto Ceribelli	" " "
	Tullio D'Amico	" " "
	Guiliano Montanti	" " "
	Salvatore Path (Dr.)	" " "
	Eduardo Pallastri	" " "
	Alfonso Tallieri	" " "
Ethiopians — "qualified"	Getachew Kassaye and Company	Auditing
	Bocre-tsion Haile and Company	Auditing
	Araya Bekele (practicing individually)	Auditing

* Based on preliminary survey of information prepared in Ethiopia by Dr. Paul Cone, CPA, and assistant to the vice-president of business affairs of Haile Selassie I University (1964-67), and by Johannes Kinfu, assistant dean at the College of Business Administration at Haile Selassie I University, for "Research on Public Accounting in Ethiopia," unpublished material, 1966.

ACCOUNTING EDUCATION

Ethiopia does have a focal point for the education of future accountants. Accounting education in Ethiopia was formally initiated in 1950 with the establishment of the University College of Addis Ababa, which later was consolidated into Haile Selassie I University. Since 1963, the College of Business Administration of Haile Selassie I University has had an accounting curriculum substantially identical to accounting curricula in the United States; American textbooks were and are still used, and American professors were employed to develop an adequate indigenous teaching staff. Today, this college is the principal source of university-trained accountants, graduating approximately one hundred accounting majors by 1970. In addition many Ethiopian students studying abroad have returned with accounting degrees and M.B.A. degrees to enter business or governmental agencies. In all, approximately 100–150 individuals are believed qualified to satisfy the normal American criterion of a bachelor's degree with an accounting major.

The measurement of accounting experience as a criterion for certification is more difficult. Corporate audit requirements are not clearly specified. What constitutes experience? How does one measure the quality of audit experience? Are years of seniority, number of audits, or participation under a foreign-qualified accountant adequate as criteria for experience? Would American or British standards of service be reasonably fair and practicable in the Ethiopian context?

AUDITOR'S OPINIONS

According to the commercial code, auditors are expected to comment on two items in the financial reports of corporations; these are the accounts and the report of the Board of Directors. Several important problems arise from these requirements.

First, the code is ambiguous as to what the accounts are. Some auditors interpret this as the results of operations being accounted for by management (Board of Directors), thereby including the Board of Directors' report and the financial statements; others maintain that "the accounts" refers only to the financial statements (audited balance sheet and income statements). Thus, when expressing an opinion, it is not clear whether the auditor is expressing opinion on both or just on the audited financial statements.

Second, the commercial code contains an explicit requirement for the auditors to comment on the report of the Board of Directors. The

Board of Directors' report is prepared solely by the directors and consists of a brief general progress report indicating events which the directors deem necessary to bring to the attention of shareholders. The code requires the auditors to comment on this progress report or express an opinion on the opinion of the Board of Directors — something more than simply expressing an opinion on the financial statements and records of the company.

Most of the practicing auditors in Ethiopia, however, have preferred to avoid any commitment in this case by refraining from commenting on the Board of Directors' report. They simply indicate in their audit report that they have "no comment" concerning the Board of Directors' report. Judged by contemporary reporting standards, it is difficult to discern the meaning of "no comment" — whether it means "no opinion" at all (therefore a disclaimer or an adverse opinion), or whether "no comment" means everything is proper, therefore an unqualified opinion.

CHANGES NEEDED

As a starting point the code at least did provide a good basis for the corporate accounting and auditing requirements. At present, however, the original accounting and auditing provisions seem to have outgrown their usefulness and require amendment to provide proper and adequate accounting information and to meet acceptable auditing standards.

The accounting provisions should be amended to incorporate proper accounting concepts, principles, and methods for the recognition, valuation, and classification of such items as capital, assets, and reserves (surplus). The present provisions fail to recognize properly the distinction between earnings and invested capital in their accounting requirements relating to legal capital, surplus, dividends and treasury stock. Neither do the provisions recognize income as a measure of value; instead emphasis is placed on the balance sheet and the trust fund concept of capital. Implicit discounts on capital issues are not recognized, nor does the commercial code provide for the reduction of capital through the acquisition of treasury stock. Sources of ownership equity are not properly distinguished, nor are sources of surplus identified and classified according to the nature of their accounting entry. There seems to be confusion between the terms reserve and surplus due to a lack of an adequate definition and comprehension of the terms. The purpose of depreciation measurement is not clearly delineated, and the significance of depreciation as a tool of economic policy in an underdeveloped

country such as Ethiopia is ignored. As a consequence, assets and liabilities are often misstated and the periodic income and financial position of a company misrepresented. The provisions, particularly those relating to accounting terminology, need clearer and more concise definitions of terms to clarify the intent.

The auditing provisions also need amending to define an auditor and to prescribe adequate reporting standards and auditing procedures. Presently, the audit reports vary in size, form, contents, and in the manner in which they refer to and adhere to the Commercial Code's requirements. The audit reports also differ from literal code requirements in wording, in an attempt to show conscientiousness and cautiousness by practitioners in audit report preparation. For example, practitioner's audit reports do not certify, but "express opinion on" the correctness of the condition of company affairs despite the code's requirement *to certify* the accounts and Board of Directors' report.

The development and imposition of accounting and auditing standards and procedures cannot be achieved without the establishment of minimum professional requirements. There is an imperative need to build the educational structure and administrative machinery necessary for the establishment and development of an accounting profession in Ethiopia. Underdeveloped countries, such as Ethiopia, cannot wait for an accounting profession to develop voluntarily in a self-regulated manner as was the case in economically advanced countries, such as the United States and Britain. Ethiopia must make a deliberate legislative act to establish an accounting profession and to regulate and supervise the development of accounting and public accounting practice. Undoubtedly there is some advantage to establishing an accounting profession by legislation though it may become inflexible and tend to remain permanently in force long beyond its usefulness. This is the price that must be paid, however, to quicken the pace of development.

The establishment and development of an accounting profession via legislation in underdeveloped countries has at least, one advantage: the accounting profession in these countries will have the advantage of legal sanction in enforcing requirements and standards, which the American accounting profession and other self-regulated professions lack.

PROFESSIONAL BOARD

At present in Ethiopia there is a draft legislative proposal to establish a Public Accountant Certification Committee, which will not only cer-

tify public accountants but also establish minimum educational and experience requirements, a code of ethics and professional standards, and rules of suspension or revocation of license. In general, it will supervise the overall development of the accounting profession in Ethiopia. The committee would be a part of the Ministry of Industry and Commerce, which is also responsible for the enforcement of the Commercial Code. The committee will consist of seven members, one to be chosen by the Ministry of Industry and Commerce, one by the auditor general,[2] and five by vote of annual and biannual meetings of all persons certified as public accountants. For the initial period the public accounting members of the committee are to be chosen from persons who are known by the ministry to be exceptional members of the Ethiopian accounting profession. Since five of the seven committee members are to be "public accountants" chosen by the certified public accountants of Ethiopia, the public accountants can exercise significant control over committee meetings. Thus, the members of the accounting profession at large who elect the accountants' members of the committee have the opportunity to supervise not only their own members but also the activities of the committee in general.

If enacted, this legislation will represent a milestone in the development of a professional accounting society in Ethiopia; the committee would be the first of its kind.

However, it is imperative that such a law is not enacted hastily; it should be discussed widely, involving the participation and contribution of as many interested parties as possible. Currently the Imperial Ethiopian Government Department of Auditor General has taken a deep interest in this matter, and a working committee has been formed under the auspices of the Department of Auditor General to prepare and pave the way for the formation of a public accounting profession in Ethiopia and to discuss and review the draft law and other similar proposals. The working committee is composed of the chairman of the Department of Accounting of the College of Business Administration at Haile

[2] The auditor general, a high official of ministerial rank within the Ethiopian government, directs the Department of the Auditor General. This department, an independent ministry with its own chapter, is assigned the responsibility to audit all government accounts and to report annually directly to the Parliament and the emperor. The department is also authorized to audit state enterprises (both semipublic or public) and is even requested to review the state budget. Thus, in principle, it has extensive powers and duties; in practice, however, its function has been far from its legislative scope because of a lack of qualified personnel.

Selassie I University, the Ministry of Industry and Commerce, the auditor general, and two representatives from the practicing public accounting firms in Ethiopia.

There are several recommendations we would suggest to be incorporated into the legislative proposal before enactment:

1. We recommend that the name be changed to the Committee on Public Accounting in Ethiopia to indicate that its responsibility is more than certification processing.
2. The draft legislation should be amended to prescribe generally only the powers and duties of the committee, giving recognition to the establishment of its subcommittees and working groups for the certification process, for examination administration, for research and accounting literature development, for the evaluation of certificates, and for educational curricular development.
3. The proposal should permit setting several alternatives for minimum educational and practical training requirements which would be determined by a subcommittee on certification and reviewed from time to time. The present proposal attempts to set a rigid rule of (1) three years of experience and three years of accounting and auditing training in an institution of higher learning, or (2) five years of experience and two years of accounting and auditing training in an institution of higher learning. The present proposal seems to emphasize experience more than it does educational training requirements. The intent of this requirement is to recognize the Ethiopians who have acquired the necessary skill by experience but who have had no more than minimal academic training, which is understandable. But a two- or three-year educational requirement is not enough to equip an accountant with the necessary accounting and auditing education or provide him with the related courses, such as knowledge of the commercial code and basic general business administration courses essential for a public accountant.

What the proposed legislation has failed to distinguish is (a) the educational and experience requirements necessary now to certify the public accountants presently in practice, and (b) the requirements needed for the certification of future public accountants under more rigorous and rigid requirements.

ROLE OF THE UNIVERSITY

The assistance and help of the accounting educators of the Haile Selassie I University and the College of Business Administration are

very important in the establishment and development of an Ethiopian accounting profession, particularly since the primary requisite of a profession is one of an adequate base of knowledge. Thus, the cooperation and guidance of Haile Selassie I University are essential to the certification process and the establishment of the content of knowledge and educational training required in such certification. In fact, at this early stage of the formation of the Public Accountant Certification Committee, the participation of accounting educators from the Haile Selassie I University is of utmost importance in shaping the future course of public accounting in Ethiopia. We feel the proposed legislation has not given enough consideration to this fact; we recommend its amendment to recognize the importance of involving educational institutions in the development of an accounting profession. To this end the accounting curriculum also should be strengthened and improved to include courses on accounting theory, the analysis of accounting provisions of the Commercial Code, and auditing problems of Ethiopia.

The Slip Accounting System: Traditional Bookkeeping Procedures in Japan

KYOJIRO SOMEYA*

An accounting system which uses slips for journalizing purposes or slips bound, account by account as substitutes for accounting records, and, therefore, requires neither journal nor ledger is called "slip accounting" or "slip bookkeeping." Slips were introduced into Japan early in the Meiji era (1868–1911) by the Englishman, Alexander Allan Shand, who designed a bookkeeping system for the National Bank of Japan. Since that time, this method has been employed not only by Japanese banks, but also by nearly all Japanese business firms. While accounting systems in Europe and the United States primarily use accounting books, those in Japan depend largely upon slips. This is a singular characteristic of Japanese accounting.

General Points

The "slip" constitutes the basic bookkeeping document. It describes briefly the details of a transaction and becomes a means of recording, calculating, and communicating the effects of the transaction. Receipts for cash or goods issued by the recipients of the cash or goods are considered objective and verifiable evidence. These slips can be prepared inside and outside business firms to prove the occurrence of transactions.

* Kyojiro Someya, CPA, D.C.S., is Professor of Accounting at Waseda University, Tokyo, Japan, where he received his doctorate. He participated in the International Cooperative Program conducted at Ann Arbor, Michigan, by the United States government. Professor Someya has also been active in the American Accounting Association. In addition to many articles and books, he has translated several American accounting books and monographs into Japanese.

Yet, only slips prepared *within* the business are accepted as a part of the firm's accounting system.

To serve as objective and verifiable evidence, slips must bear the signatures of the personnel in charge. Receipts and other papers vary from company to company in size and method of entry. Therefore, it is inconvenient in many cases to use such documents as the main records of one company. Moreover, some transactions are not supported by vouchers from the other party. For these reasons, it is now customary for each company to prepare slips in certain forms for all its transactions and to use them as the primary accounting records.

One of the primary purposes of an accounting system is to record all transactions in the accounts. A slip prepared for each transaction facilitates the journalizing of the transaction because the slip indicates the accounts to be debited and credited. Such a slip is called the accounting slip or journalizing slip.

The following types of slip are generally used today: general, cash-receipts, cash-payments, purchases, and sales. Their use depends upon the particular accounting system adopted by the firm. There are several kinds of accounting systems which use slips: (1) the one-slip system which uses a general slip only; (2) the three-slip system, using cash-receipts, cash-payments, and general slips; and, (3) the five-slip system, using cash-receipts, cash-payments, purchases, sales, and general slips.

The fundamental method of recording a transaction is to prepare an accounting slip on the basis of a voucher, journalize it, and post it into the ledger. It is possible, however, to omit the use of the journal and post the transaction directly from the slip to the accounts in the ledger as the slip may serve as the journal. Since slips can be easily classified and totaled by account, it is possible to prepare daily summaries of slips and post the total of all slips affecting the same account. Furthermore, since slips permit duplication, it is possible to use them as the ledger by filing the duplicate slips by account.

The Single-Slip System

Direct Posting from Slips to Ledger Accounts. Under the single-slip system, general slips are prepared for all transactions. Each general slip shows the account titles and amounts to be debited and credited. Figure 1 shows an example of a slip for a cash sale transaction.

Figure 1.

GENERAL SLIP — No. 1
April 1, 197–

Amount	*Debit*	*Description*	*Credit*	*Amount*
10,000	cash	sales for cash	sales	10,000
10,000		Total		10,000

Since entries on general slips do not differ from an ordinary journal entry, the general slips when filed together form a journal, thereby eliminating the use of a journal. Figure 2, an illustrative series of Tokyo Shoten's transactions on April 1, 197– on general slips are illustrated below:

1. Cash sales $10,000
2. Cash received on accounts receivable: Kitakyushu Shoten, $50,000; Nagoya Shoten, $30,000
3. Goods in the amount of $50,000 are sold to Yokohama Shoten. Ten thousand dollars is paid in cash, balance on account
4. A loan of $50,000 is obtained from the Japan Commercial and Industrial Bank
5. Payments made on accounts payable due: Osaka Shoten, $40,000; Kyoto Shoten, $20,000
6. Cash purchases $30,000
7. Operating expenses of $20,000 are paid in cash
8. Goods purchases on account from Osaka Shoten, $50,000; Kyoto Shoten, $40,000; Kobe Shoten, $30,000
9. Goods sold on account to Kitakyushu Shoten, $50,000; Nagoya Shoten, $60,000
10. Promissory notes received on accounts receivable due: Nagoya Shoten, $40,000; Yokohama Shoten, $30,000
11. Promissory notes are drawn up on accounts payable due: Kyoto Shoten, $30,000; Kobe Shoten, $20,000

Figure 2.

GENERAL SLIP	
Cash 10,000	Sales 10,000

GENERAL SLIP	
Cash 80,000	Accounts Receivable 80,000

GENERAL SLIP	
Cash 10,000 Accounts Receivable 40,000	Sales 50,000

GENERAL SLIP	
Cash 50,000	Loan Payable 50,000

GENERAL SLIP	
Accounts Payable 60,000	Cash 60,000

GENERAL SLIP	
Purchases 30,000	Cash 30,000

GENERAL SLIP	
Operating Expenses 20,000	Cash 20,000

GENERAL SLIP	
Purchases 120,000	Accounts Payable 120,000

GENERAL SLIP	
Accounts Receivable 110,000	Sales 110,000

GENERAL SLIP	
Notes Receivable 70,000	Accounts Receivable 70,000

GENERAL SLIP	
Accounts Payable 50,000	Notes Payable 50,000

Under the single-slip system, the general slip is called the journalizing slip or the accounting slip. In this article, however, it is called the general slip for the purpose of comparison with the multiple-slip systems.

Preparing Daily Reports and Posting Totals to Ledger Accounts. The amounts on the general slips could be posted to the ledger accounts directly. Since the slips can be classified in any way, it seems advisable to total them by the individual accounts and to post totals only, thereby reducing the number of postings required. This will also decrease the number of errors made in the posting process.

Two methods of posting the total amounts to the ledger accounts can be used: (1) The totals may be entered in a two-column journal and posted to their respective accounts; or (2) a daily report may be prepared and used to post the amounts to their respective accounts. A daily report is a summary which gives the total debits and total credits for each account each day. A daily report prepared from the general slips prepared for the April 1 transactions of Tokyo Shoten is illustrated in Figure 3.

The P/R column shows the number of each account in accordance with a chart of accounts.

Figure 3.

DAILY REPORT April 1, 197–						
Debit	*P/R*	*No. of Slips*	*Account*	*No. of Slips*	*P/R*	*Credit*
150,000	1	4	Cash	3	1	110,000
70,000	2	1	Notes Receivable			
150,000	3	2	Accounts Receivable	2	3	150,000
			Notes Payable	1	11	50,000
110,000	12	2	Accounts Payable	1	12	120,000
			Loan Payable	1	13	50,000
			Sales	3	31	170,000
150,000	41	2	Purchases			
20,000	42	1	Operating Expenses			
650,000						650,000

Trial-Balance Form Ledger. A daily report prepared from general slips can be expanded further by adding to or subtracting from the balances of the accounts of the preceding day the debit and credit amounts of the accounts indicated in the daily report. When a balance column is provided in the daily report and the balances of the accounts for each day are entered therein, the daily report can be used as a ledger. This type of ledger is called a tabular ledger. By totaling the debit and credit balances of the accounts on this type of ledger, a trial balance can be prepared to test the accuracy of the postings.

Because this type of ledger fulfills the function of the trial balance, it is called the trial-balance ledger (see Figure 4).

Multiple Copies of Slips. When the general slips for each day are classified and totaled account by account and the totals are posted to the respective ledger accounts, the ledger accounts become too condensed to show any details. Therefore, it is advisable to prepare for each general slip as many copies as there are accounts to which the entries in the slip should be posted. In this way, the original slips are filed in the chronological order of transactions while the duplicate copies are filed by account. The account on each slip should be circled. See Figure 5: Goods in the amount of $50,000 are sold to Yokohama Shoten.

Ten thousand dollars is received in cash. The balance is on account.

Single-Account Slip. By preparing each slip with as many copies as the number of accounts affected, these copies can conveniently be filed by individual accounts. This method has one disadvantage, however. The number of copies needed would vary from transaction to transaction. Therefore, it seems advisable to enter only one account in the debit and credit column of each general slip.

When using single-account journal slips, the slip for each transaction is best prepared in triplicate so that the first copy can be filed in the chronological transaction order, the second used as a debit slip, and the third as a credit slip. (See example in Figure 6.) When single-account general slips are used, the ruled lines on the debit slip and those on the credit slip are usually printed in different colors for easier classification. The slips are filed chronologically.

When using single-account general slips, transactions involving more than one account in the debit and/or the credit column should be divided so that the transactions can be journalized in such a way that only one account will appear in the debit and credit columns. For example,

Figure 4. Trial Balance Ledger

LEDGER April 1, 197–								March 31, 197–
Account No.	*Account*	*No. of Slips*	*Debit*	*No. of Slips*	*Credit*	*Dr./Cr.*	*Balance*	*Balance*
1	Cash	4	150,000	3	110,000	Dr.	90,000	50,000
2	Notes Receivable	1	70,000			"	150,000	80,000
3	Accounts Receivable	2	150,000	2	150,000	"	200,000	200,000
4	Inventories					"	100,000	100,000
5	Fixtures					"	50,000	50,000
41	Purchases	2	150,000			"	150,000	
42	Operating Expenses	1	20,000			"	20,000	
	Total of Debit Items					Dr.	760,000	480,000
11	Notes Payable			1	50,000	Cr.	150,000	100,000
12	Accounts Payable	2	110,000	1	120,000	"	160,000	150,000
13	Loan Payable			1	50,000	"	80,000	30,000
21	Capital Stock					"	200,000	200,000
31	Sales			3	170,000	"	170,000	
	Total of Credit Items					Cr.	760,000	480,000
	Today's Total		650,000		650,000			

Figure 5. Multiple Copies of Slips

GENERAL SLIP
April 1, 197–

Debit	*Amount*	*Credit*	*Amount*
Cash	10,000	Sales	50,000
Accounts Receivable	40,000		
Total	50,000	Total	50,000

GENERAL SLIP
April 1, 197–

Debit	*Amount*	*Credit*	*Amount*
Cash	10,000	Sales	50,000
Accounts Receivable	40,000		
Total	50,000	Total	50,000

GENERAL SLIP
April 1, 197–

Debit	*Amount*	*Credit*	*Amount*
Cash	10,000	Sales	50,000
Accounts Receivable	40,000		
Total	50,000	Total	50,000

of Tokyo Shoten's transactions on April 1, the one described as "goods in the amount of $50,000 are sold, $10,000 are received in cash, and the balance is on account" can be divided as shown under Method 1 and Method 2 in Figure 6.

Under Method 1, the transaction is journalized as an account receivable, of which $10,000 are received immediately in cash. Under Method 2, the transaction is journalized as if there were two transactions — a cash and a charge sale.

(for chronological file)

Method 1				
1. Accounts Receivable	50,000		Sales	50,000
2. Cash	10,000		Accounts Receivable	10,000
Method 2				
1. Cash	10,000	10,000	Sales	10,000
2. Accounts Receivable	40,000	40,000	Sales	40,000

The Three-Slip System

Introduction of Special Slips. Under the three-slip system, the cash-receipts and the cash-payments slips are used in addition to the general slip. Separate cash-receipts slips and cash-payments slips are needed because in most business firms cash transactions are more frequent than any other transactions. Special cash-transaction slips allow an easy distinction of cash transactions from other transactions. Furthermore, entries in slips can also be simplified.

The cash-receipts slip is normally ruled with red lines. Since a cash-receipt transaction is automatically a debit to the cash account, only the account title to be credited is stated in the account title column as in Figure 7.

The cash-payments slip, also called the disbursements slip, is normally ruled with blue lines. Since a cash-payment transaction is always a credit to cash, only the account title to be debited is stated in the account title column as in Figure 8.

Daily Reports on Cash Receipts and Cash Payments. The amount to be posted to debit the cash account is the total of all amounts entered in cash-receipts slips. The amount to be posted to credit the accounts other than the cash account can be found by totaling the amounts entered in cash-receipts slips account by account. If a daily summary

Figure 6. Single Account Journal Slips

GENERAL SLIP April 1, 197–			
Debit	*Cash*	*Credit*	*Sales*
Description			
Total			10,000

(for chronological file)

GENERAL SLIP April 1, 197–			
Debit	*Cash*	*Credit*	*Sales*
Description			
Total			10,000

(for debiting)

GENERAL SLIP April 1, 197–			
Debit	*Cash*	*Credit*	*Sales*
Description			
Total			10,000

(for crediting)

Method 1

1. Accounts Receivable	50,000	Sales	50,000
2. Cash	10,000	Accounts Receivable	10,000

Method 2

1. Cash	10,000	Sales	10,000
2. Accounts Receivable	40,000	Sales	40,000

Figure 7.

CASH-RECEIPTS SLIP April 1, 197–	
Account Credited	*Sales*
Description	
Total	10,000

Figure 8.

CASH-PAYMENTS SLIP April 1, 197–	
Account Debited	*Accounts Payable*
Description	
Total	40,000

of cash-receipts slips is prepared by classifying and totaling the cash-receipts slips for the day account by account, the totals entered in the summary are posted to debit the cash account and credit the other accounts. This daily summary of cash-receipts slips is called the daily report of cash receipts. (See Figure 9.)

When goods are sold to Yokohama Shoten and $10,000 of the sales price of $50,000 is received in cash and the balance recorded on account, the posting to debit the accounts receivable account and to credit the sales account is made from the daily report prepared from general slips. Therefore, the title of the account affected, entered on the cash-receipts slip, should be "miscellaneous." Since no posting is made from the daily report of cash receipts to the accounts receivable and sales accounts, a

check mark is placed in the P/R column of the daily report of cash receipts to indicate that there is no need for posting.

Figure 9.

CASH-RECEIPTS SLIP	
Sales	10,000

CASH-RECEIPTS SLIP	
Accounts Receivable	80,000

CASH-RECEIPTS SLIP	
Miscellaneous	10,000

CASH-RECEIPTS SLIP	
Loan Payable	50,000

DAILY REPORT OF CASH RECEIPTS
April 1, 197–

Account	*No. of Slips*	*P/R*	*Amount*
Accounts Receivable	1	3	80,000
Loan Payable	1	13	50,000
Sales	1	31	10,000
Miscellaneous	1	2	10,000
Cash	4	1	150,000

The amount to be posted to credit the cash account is the total of all amounts entered in cash-payments slips. The amounts to be posted to debit other accounts can be determined by totaling the amounts entered on the cash-payments slips for each account. If a daily summary of cash-payments slips is prepared by classifying and totaling the slips for the day, account by account, the total amount of the summary report is posted to credit the cash account and the total amount of each account to debit the other related accounts in the ledger. The daily summary of cash-payments slips is called the daily report of cash payments or disbursements.

Daily Report of Other Transactions. With cash-receipts slips being used for cash receipts and cash-payments slips for cash payments, all other transactions are recorded on general slips. The method of entry is identical to that used for the general slips under the single-slip system. Each general slip should show the account title and amount to be debited and the account title and amount to be credited.

To post the entries of the general slips to the ledger accounts, daily

totals for each account are obtained by classifying and totaling the general slips account by account. The daily report based on general slips summarizes the general slips and shows the daily total for each account.

For posting from the daily report based on general slips to the ledger accounts, the amounts shown for each account on the debit and credit sides of the report should be posted to the corresponding ledger accounts. Because the posting to the cash account is made from the totals of the daily report on cash receipts and the daily report on cash payments, a check mark is placed in the P/R column of the daily report based on general slips to show that there is no need for posting.

Figure 10.

GENERAL SLIP	
Cash 10,000	Sales 50,000
Accounts Receivable 40,000	

GENERAL SLIP	
Purchases 120,000	Accounts Payable 120,000

GENERAL SLIP	
Accounts Receivable 110,000	Sales 110,000

GENERAL SLIP	
Notes Receivable 70,000	Accounts Receivable 70,000

GENERAL SLIP	
Accounts Payable 50,000	Notes Payable 50,000

DAILY REPORT
OF
OTHER TRANSACTIONS
April 1, 197–

Debit	*P/R*	*No. of Slips*	*Account*	*No. of Slips*	*P/R*	*Credit*
70,000	2	1	Notes Receivable			
150,000	3	2	Accounts Receivable	1	3	70,000
			Notes Payable	1	11	50,000
50,000	12	1	Accounts Payable	1	12	120,000
			Sales	2	31	160,000
120,000	41	1	Purchases	-		
10,000	2	1	Cash			
40,000						400,000

Combined Daily Report. When the three slips, cash-receipts, cash-payments, and general, are used, these slips are classified and totaled to prepare three daily reports: the daily report of cash receipts, the daily report of cash payments, and the daily report based on general slips. For combined posting a combined daily report may be prepared by totaling for each account the amounts entered in the three daily reports instead of directly posting the amounts shown in them to the ledger accounts. The daily totals entered in the combined daily report can then be posted to the ledger accounts.

Therefore, the balances in the accounts at the end of the day can be determined by adding to or subtracting the debit and credit amounts of the accounts shown in the combined daily report from the balances of the previous day. By providing a balance column in the combined report and entering the balances at the end of each day in this column, the combined daily report can be used as a trial-balance form ledger.

The daily report shown on the next page is a combination of the daily report of cash receipts, the daily report of cash payments, the daily report based on general slips and the combined daily report. It illustrates the relationship between the first three daily reports and the combined daily report. The report has a balance column and, therefore, can serve as a trial-balance ledger. The amounts in the balance column are determined by adding to or subtracting from the balances of March 31. For this reason, the amounts marked "unclassified" represent a transaction included in two daily reports which are offset by each other to avoid double posting.

Five-Slip System

Two more slips — purchases and sales slips — are added to the cash-receipts, cash-payments, and general slips when purchases and sales are as frequent as cash receipts and payments. By using specialized slips for purchases and sales transactions, such transactions are easily distinguished from other transactions. The purchases slip is prepared on the basis of the purchase invoice but the sales slip is generally a duplicate copy of the sales invoice. This is the five-slip system.

Purchase transactions are journalized on purchases slips and are summarized in the daily report of purchases which is posted to debit the purchases account and to credit the accounts payable accounts. Sales transactions are journalized in sales slips and are totaled in the daily report of sales which is posted to debit the accounts receivable account and to credit the sales account.

Figure 11.

(March 31, 197–)

DAILY REPORT
April 1, 197–

Acct. No.	Account	Daily Report of Cash Receipts		Daily Report of Cash Payments		Daily Report of Other Transactions		Total		Balance	
		Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
1	Cash	150,000			110,000	xxx	xxx	150,000	110,000	90,000	
2	Notes Receivable					70,000		70,000		150,000	
3	Accounts Receivable		80,000			150,000	70,000	150,000	150,000	200,000	
4	Inventories									100,000	
5	Fixtures									50,000	
11	Notes Payable						50,000		50,000		150,000
12	Accounts Payable			60,000		50,000	120,000	110,000	120,000		160,000
13	Loan Payable		50,000						50,000		80,000
21	Capital Stock										200,000
31	Sales		10,000				160,000		170,000		170,000
41	Purchases			30,000		120,000		150,000		150,000	
42	Operating Expenses			20,000				20,000		20,000	
	Unclassified		10,000			10,000		xxx	xxx	xxx	xxx
		150,000	150,000	110,000	110,000	400,000	400,000	650,000	650,000	760,000	760,000

Conclusions

Various methods of employing slips to record transactions in accounts have been presented. The advantages and disadvantages of these three-slip accounting systems may be indicated.

The single-slip system is easy to operate as it uses only one type of slip as the accounting slip. Copies produced by duplication can be filed by account to serve as substitutes for ledger accounts. On the other hand some transactions cannot be described adequately on slips because the same form of slip is used for all transactions, and slips cannot easily be prepared by clerks other than accounting clerks because a knowledge of the debit and credit accounts is necessary.

The three-slip system is easy to operate. Cash-receipts slips and cash-payments slips are easily prepared if the clerk can singly distinguish cash receipts from cash payments, even though he does not know double entry principles. On the other hand, the system does not completely remove the shortcomings of the single-slip system as purchases and sales must be entered on general slips as do other miscellaneous transactions.

The five-slip system is better in several ways. The most suitable form for each type of transaction can be developed for the slips used for cash receipts, cash payments, purchases, and sales. The different type of slips can be prepared easily by all personnel not just accountants. On the other hand, the system is difficult to operate as it requires many types of slips, and because the slips differ in size and form, they cannot be substituted for ledger accounts by binding them.

Each of the three methods has its advantages and disadvantages. The single-slip system is most suitable for those small businesses in which the owners themselves oversee sales, purchases, cash receipts and payments, and accounting. In other cases, the accountant should prepare accounting slips on the basis of slips originally prepared for individual transactions by the different persons in charge of the transactions. In view of its advantages, particularly that of preparing slips largely for cash receipts and payments, the three-slip system is suitable for financial businesses which have few transactions other than cash receipts and payments. The five-slip system is considered suitable for business firms in which a considerable degree of division of labor exists in the fields of sales, purchases, cash receipts and payments, and accounting.

The slip system has many elements similar to modern punch-card and other systems based on unit posting devices. The system has been widely used in Japan with manual methods of recording for a much longer time than modern punch-card accounting.

Keeping Current on New Developments in Accounting

JOHN A. WEBER*

A primary task of the accounting journal system is to keep accounting executives and scholars abreast of current developments in their field. The results of a survey of accounting journals indicates that in recent years this journal system on the whole has reduced the average amount of time between the original submission of a manuscript and its final publication. Thus, from the point of view of the reader, that system has become somewhat more efficient than in the past.

A closer analysis of the data and a comparative view of recent developments in journal systems of related disciplines suggest, however, that the average lag within the accounting journal system will very likely increase in the future unless acceptance rates are continually reduced, particularly by the more prominent accounting journals. Though such an evolution will help to minimize obsolescence within the system by keeping lag times to publication low, this same phenomenon will make it much more difficult for accounting executives and scholars to maintain adequate surveillance of the accounting journal system. Forward-looking readers will begin now to prepare themselves for that eventuality.

* John A. Weber is an Assistant Professor of Business Administration at the University of Notre Dame. Since receiving his doctorate from the University of Wisconsin in 1969, Professor Weber has also taught at New York University. He is the author of a new book *The Market for Private Foreign Enterprise* and has published in several academic journals.

SURVEY METHODOLOGY

Accounting department heads of AACSB schools have indicated what they feel are the most prominent accounting journals.[1] This body of journals was included in the author's recent survey of over two hundred business and economic journals. Data received from such journals concerning review, acceptance, and rejection policies included: average review time, average lag time between acceptance and publication, acceptance rate, and major reasons for rejection. For most of these major accounting journals, data for 1966–67 was also available and was

[1] See Robert K. Coe and Irwin Weinstock, "Evaluating Journal Publications: Perceptions *versus* Reality," Working Paper no. 15, School of Business, Virginia Polytechnic Institute (March 28, 1969), p. 23.

Table 1.

Survey of Accounting Journals*

Accounting Journals	*Average Review Time (in weeks)*		*Average Time from Acceptance to Publication (in weeks)*		*Acceptance Rates (percentages)*	
	1966–67	*1970*	*1966–67*	*1970*	*1966–67*	*1970*
Accounting Review	9	4	17	20	40	26
Business Horizons	2	3	17	9	10	20
Federal Accountant	n.a.†	14	n.a.	14	n.a.	40
Financial Executive	n.a.	2	n.a.	n.a.	n.a.	n.a.
Harvard Business Review	n.a.	4	17	10	10	5
International Journal of Accounting	n.a.	38	n.a.	52	n.a.	55
Journal of Accountancy	6	4	17	14	26	20
Journal of Accounting Research	4	13	21	26	30	30
Journal of Business	13	11	23	26	15	n.a.
Journal of Taxation	4	3	9	7	40	50
Management Accounting	3	2	17	22	20	20
Management Science	26	6	19	12	40	33
Management Services	13	4	13	20	30	30
M.S.U. Business Topics	26	6	26	16	10	20
National Tax Journal	n.a.	8	n.a.	19	n.a.	25

Table 1. Continued

Accounting Journals	*Average Review Time (in weeks)* 1966–67	1970	*Average Time from Acceptance to Publication (in weeks)* 1966–67	1970	*Acceptance Rates (percentages)* 1966–67	1970
New York Certified Public Accountant	3	4	11	16	75	50
Operations Research	26	13	39	22	30	40
Southern Journal of Business	21	18	13	32	35	20
The Tax Adviser	n.a.	5	n.a.	8	n.a.	n.a.
Averages (excluding n.a. responses)	12.0	8.5	18.5	19.2	29.4	30.3
Averages including only journals for which data for both years is available	12.0	7.0	18.5	18.0	30.5	28.0
Comparative averages for						
13 finance journals	10.1	8.8	22.8	25.2	30.0	27.9
15 management journals	9.9	7.1	20.6	20.2	27.6	27.2
9 marketing journals	10.8	8.6	20.1	30.4	24.8	21.1
14 economics journals	11.7	9.7	26.2	28.8	28.3	19.5

* All data for 1970 is from the author's recent survey of over two hundred business and economics journals. Journals included in the table are those which indicated they typically do publish articles dealing with accounting.
Comparative data for the years 1966–67 was taken from Robert K. Coe and Irwin Weinstock, "Publication Policies of Major Business Journals," *Southern Journal of Business* (January 1968), pp. 1–10.
† The abbreviation "n.a." signifies a "not applicable" response.

used as a basis for depicting possible trends in the accounting journal system.[2]

SURVEY RESULTS

The average time between original submission of a manuscript and its final publication stood at 27.7 weeks in 1970. For the accounting

[2] Comparative data for the years 1966–67 is from Robert K. Coe and Irwin Weinstock, "Publication Policies of Major Business Journals," *Southern Journal of Business* (January 1968), pp. 1–10.

journal system as a whole, this reflected an average review time of 8.5 weeks and an average lag between acceptance and publication of 19.2 weeks.

A comparison of the 1970 data with data for the years 1966–67 shows that the average review time decreased 5.0 weeks while the average time to publication decreased .5 weeks. Thus, the overall lag time between original submission and final publication decreased by an average of 4.5 weeks (over 10 percent) for the accounting journals for which data for both time periods was available. Particularly noteworthy is that this average decrease in lag time was not effected through any substantial decline in the average acceptance rate for the accounting journals.

In view of the accounting journal system's goal of keeping executives and scholars up-to-date on current developments, the decreasing lag time to publication reflects increased efficiency in the system. While this is an important finding in itself, it takes on added meaning when compared with recent developments in the journal systems of finance, marketing, and economics. These three systems have become somewhat less effective in recent years in terms of average times to publication (growing) despite rather sharp declines in acceptance rates.

LAGGING RESEARCH IN ACCOUNTING?

Why have growing lags occurred in other journal systems (finance, marketing, and economics) and not in the accounting journal system despite generally lower and faster declining acceptance rates in these other systems?

Data collected in the survey concerning "major reasons for rejection — 1970 versus 1966–67" rejects the hypothesis that these other journal systems have simply been receiving a flood of poor manuscripts. While most of the editors surveyed indicated that superficiality and inadequate research in manuscripts were encountered more frequently in 1970 than in 1966–67, the journal systems receiving the greatest number of new manuscripts were generally not encountering these problems with much more frequency than the accounting journal system. In fact, the economics journal system, the most crowded of them all, met these problems less frequently in 1970 than in 1966–67.

Another possible answer is that meaningful research in the field of accounting is lagging. This is only hypothetical, of course, because the inference is being made from merely looking at the load factor of manuscripts in the different journal systems in recent years. The accounting

journal system may have simply been planned more effectively over time to keep up with the supply of good accounting manuscripts. Nevertheless, the hypothesis remains an interesting one since manuscript submissions to accounting journals have definitely been increasing at a slower rate than submissions to other journals' systems. Moving one further away from rejection of the hypotheses is an apparent growing incidence of superficiality in the relatively limited number of accounting manuscripts being submitted. Is the accounting theory more fully developed than the theories of related disciplines? Is it conceivable that the theory itself is less dynamic? Or are there simply just not as many people researching and writing about accounting?

THREAT OF GROWING LAGS TO PUBLICATION IN THE FUTURE

Close examination of the data leaves one far from optimistic concerning the outlook for continuing decreases in the time between submission and publication for the accounting journal system. Nearly all of the improvement achieved between 1966–67 and 1970 in terms of shortening the average lag between original submission and final publication resulted from improvement in the average review time rather than from a decline in the average lag time between acceptance and publication. While improvements in average review times are still clearly possible for at least six of the accounting journals surveyed, future improvement of any significant proportion in the average review time for the accounting journal system as a whole cannot be expected, since most of the journals already review manuscripts in six weeks or less.

The key to keeping the efficiency of the system high in terms of minimizing the overall average lag in the system is, therefore, to keep down the average time between acceptance and publication. This average lag was relatively short for the accounting journal system as a whole in 1970; nor did it increase between 1966–67 and 1970. Despite this seemingly favorable overall trend, at least seven accounting journals did have greater lags between acceptance and publication in 1970 than in 1966–67. The survey provided no evidence that any of these seven journals increased acceptance rates over the time period in question. Therefore, these seven accounting journals have simply been receiving a larger number of manuscripts in recent years. All but one of these seven now have lags of twenty weeks or more. Without further adjustments in acceptance rates, even more severe lags will be developing in these journals. Already, four of the accounting journals have lags to publication of six months or more.

Reducing acceptance rates is one means of holding down lag times to publications. Of the seven accounting journals with acceptance rates higher than average in 1970 (30.3 percent), only two had longer than average lags to publication. Most of the journals with the longer lags, therefore, do not have high acceptance rates. This infers, as in actuality is the case, that some accounting journals receive a great many more manuscripts than others. This is caused by two factors. First, some accounting journals concentrate upon specific accounting topics — for example, the *Journal of Taxation.* Given the rapid growth of interest in any specific accounting topic, journals specializing in that topic will receive a large number of submissions. Secondly, and more importantly, some of the general accounting journals are more prominent than others.[3] For obvious reasons, most authors prefer to publish in the "more prominent" journals.

From the point of view of an author, the prestige associated with publishing in one of the more prominent management journals may overcome the disutility associated with the longer lag to publication typically found in such journals. To let such willingness sway journals' decisions to accept manuscripts which will not be published for six months or more, however, betrays the goals of the accounting journals system from the point of view of the reader. The reader should receive the best first. The present system, however, tends to give him the best last since the prominent management generally have longer lags to publication. Anyone who reads the "more prominent" journals knows that they do not always have the best articles. Given that these journals have the greatest number of manuscripts from which to choose, it is not altogether unreasonable to suggest that these journals typically do publish better articles on the whole than do the less prominent journals.

While other means such as shortening articles, enlarging editions, and increasing the number of editions per year have been used by various journals in attempts to stem increases in lag times to publication, such steps do not result in speeding the flow of manuscripts to readers if they are counteracted by the acceptance of an excessive number of articles by these same journals.[4]

---

[3] As mentioned in footnote 1, a survey of accounting department heads of AACSB schools has suggested which of the accounting journals are most prominent.

[4] *American Economic Review* published twice as many articles in 1970 as in 1966 and in recent years, other journals (for example *Business Horizons, Econometrica,* and *Journal of Finance*) have attempted to shorten lags to publication by increasing their number of editions per year. Only one of the four journals mentioned above, however, decreased its lag time to publication between 1966–67 and 1970 despite increasing the number of articles published per year.

If, as is likely, the number of accounting manuscripts grows substantially during the 1970s due to the acceleration of research and developments in the field as well as continuing pressures to publish, the maintenance of the efficiency of the accounting journal system on the whole (in terms of short lag times) will depend upon the commitment of each individual journal to keep down its overall lag time to publication. For the journals receiving the greatest flood of new manuscripts during the 1970s and for the journals which currently have relatively long lag times (six months or more), the primary tool for effecting such a strategy is to sharply cut back their acceptance rates. Such a policy is currently being implemented, albeit not strongly enough, in the journal systems of finance, marketing and economics.

While the timing of publication is certainly more critical for some manuscripts than others, the rationale for the proposed strategy is clear. If the body of accounting journals is viewed as a system, what reason is there for any article to wait fifty-two weeks for publication when another journal within the system could publish the article in fifteen weeks?

As considered above, all accounting journals do not cover all accounting topics. For example, the *Journal of Taxation* and the *National Tax Journal* concentrate upon the tax aspects of accounting. These two journals cannot be expected to help diminish the average overall system's lag to publication by accepting manuscripts not specifically suited to their editorial needs. However, in general, enough potential outlets exist for manuscripts in each specific area of accounting. The substantial number of general business journals handling items dealing with any of a number of specific accounting topics provide the system with added flexibility in this regard.[5] In addition, as one individual topical area

[5] For example, at least thirty-four journals not included in the table responded in the survey that they do accept manuscripts dealing with many business topics — including accounting. These are classified as general business journals rather than accounting journals per se. The five most important general business journals are included along with the major accounting journals in the table. The currently less well-known general business journals include a set of twenty-two university bureau of business research journals which concentrate on manuscripts of national rather than regional interest: *Arkansas Business and Economic Review, Baylor Business Studies, Business and Economic Dimensions, Business and Government Review, Business and Society, Business Inquiry, Business Quarterly, Carroll Business Bulletin, Economic and Business Bulletin, Journal of Business* (Seton Hall), *Marquette Business Review, Miami Business Review, Michigan Business Review, Mississippi Valley Journal of Business and Economics, Montana Business Quarterly, Nebraska Journal of Economics and Business, Oklahoma Business Bulletin, Philippine Review of Business and Economics, Pittsburgh Business Review, Quarterly Review of Economics and Business, Sloan Management Review,* and *University of Washington Business Review,* and a set of twelve nonuniversity sponsored general business journals: *Business Man-*

within accounting grows in importance, new journals are born — specializing in this area. This reduces the pressure on the system as a whole.

In sum, what is predicted for the accounting journal system is what is already transpiring in the journal systems of related disciplines. The strategy spreads out the most meaningful accounting manuscripts among a greater number of journals with the intent of maintaining and increasing the efficiency of the system as a whole via accelerating the publication of the best accounting manuscripts.

This phenomenon in the accounting journal system, likely as it is in view of what is now happening in related journal systems, has important implications for accounting executives and scholars who desire to keep up-to-date with new developments in their field.

IMPLICATIONS FOR ACCOUNTING EXECUTIVES AND SCHOLARS

As we move into the 1970s, significant new developments in accounting will be made public in a much larger body of journals than at present. Many of the currently less prominent general business journals will, in all likelihood become important vehicles for such manuscripts. Barring any significant advances toward a centralized information service covering the whole business journal system, serious accounting executives and scholars will, therefore, have to maintain a much broader surveillance of journals as time passes.[6]

While individual corporate information systems may provide a small minority of businessmen today with an opportunity to keep up-to-date with new developments as presented in a wide variety of journals, the vast majority of executives and scholars have no such convenience at their disposal. In order to avoid the extremes of becoming either out-of-date or overwhelmed, therefore, the intelligent businessman will begin now to become more familiar with and to depend more upon indexing, abstracting, microfilming, and other specialized information services which, if used regularly and intelligently, will not only improve his coverage and keep him up-to-date with new developments as presented in journals, but will also markedly reduce the time now required for such surveillance and reading activities. (See Figure 1.)

---

agement, Business Perspectives, Business World, Canadian Business, Director (India), *Indian Management, Industrial Management, Journal of Commerce, Journal of Management Studies, Manage, Management,* and *Management Review.*

[6] Notably, physicists, chemists, and psychologists have made substantial progress toward the development of centralized, computer-based information processing and retrieval system to maintain continual surveillance over their respective journal systems. For a discussion of these systems, see: Stanford Berg, "Increasing the efficiency of the Economics Journal Market," *Journal of Economic Literature* (September 1971), pp. 804ff.

Figure 1.

Indexing and Abstracting Services Covering Journals in Which Accounting Articles Typically Appear

Accounting Articles

Commerce Clearing House, New York — Abstracts accounting-related articles from over 125 journals

Accountants Index

American Institute of Certified Public Accountants
Indexes all accounting literature published in English

Accountants Digest

L. L. Briggs, Burlington, Vermont

Business Periodicals Index

H. W. Wilson Co. — Annotates selected articles on all business topics from over 200 business journals

Business Methods Index

Keith Business Library, Ottawa, Canada — Indexes over 300 leading business journals and magazines

Predicasts

Predicasts, Inc. — Abstracts all economic, industry, and product forecasts from 250 publications

Congressional Information Service (new in 1970)

C. I. S., Inc., Washington, D.C. — Serves as a master index and abstracting service for all congressional publications

Public Affairs Information Service

P. A. I. S., Inc., New York — Regularly indexes and briefly annotates selected articles from over 700 journals, including a large number of business journals

Other general indexing services with some accounting journal coverage:

Readers' Guide to Periodical Literature
Social Science and Humanities Index
International Index to Periodicals
International Bibliography of the Social Sciences

management international review

International Review for Management and Managerial Sciences

In recent years a great deal of attention has been paid to those branches of learning which may have something to say to managers. While the economist has long shared the confidence of management, particularly in Germany, Italy and the Netherlands, and while business economics and industrial economics have grown to subjects in their own right, an equal interest is now arising, particularly in the English-speaking countries, in those aspects of management concerned with its human forces — with sociology, psychology and the behaviour of organizations undergoing technological change. These are the domains of the so-called managerial sciences. The recognition of these as subjects in their own right is having profound effects upon the managerial outlook; in particular the development of formal and mathematical modes of thought — as in operations research — has thrown new light on the practical solution of many management problems. There is today a universal need to extend the use of these methods, but it is just as necessary that the mathematician should know the practical needs of the manager as that the manager should recognize the power of these new forms of analysis. What is to be desired throughout the field is an integrated outlook, calling for close collaboration between the scientists and the managers of all countries, and based upon sound bargaining between theory and practice.

The magazine, *Management International Review,* would, on that account claim to be the medium of exchange between practising managers and research workers. It will be devoted mainly to the nature and solution of management problems of business enterprises, corporations of public authorities and other large scale institutions. In addition, it will give particular attention to ideas and progress in the field of management education.

Management International Review will be addressed to practising managers and active research workers, and it must also rely upon them for its published material. For it to develop as a medium of exchange it must first rely upon those, who from their experience or researches, have something to contribute; it must be essentially the product of co-operation.

Management International Review will appear in three languages: English, French, and German. Each article will be published in the language chosen by its author, as well as in English. A summary will appear in the remaining languages.

Annual subscription DM 48 — (including postal fees), four times a year (including of two double-numbers), the volume of all issues comprises at least 640 pages (size 245 × 170 mm).

Betriebswirtschaftlicher Verlag Dr. Th. Gabler GmbH,
P.O. Box 11, D 6200 Wiesbaden 1 (Fed. Rep. of Germany)

ONE YEAR'S SUBSCRIPTION TO *THE INTERNATIONAL JOURNAL OF ACCOUNTING EDUCATION AND RESEARCH*

Volume 1, Numbers 1 and 2 (1965–66)	$3.00
Volume 2, Numbers 1 and 2 (1966–67)	3.00
Volume 3, Numbers 1 and 2 (1967–68)	3.00
Volume 4, Numbers 1 and 2 (1968–69)	3.00
Volume 5, Numbers 1 and 2 (1969–70)	3.00
Volume 6, Numbers 1 and 2 (1970–71)	3.00
Volume 7, Numbers 1 and 2 (1971–72)	3.00
Single copy issue	1.80

OTHER PUBLICATIONS OF THE CENTER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING

A Statement of Basic Accounting Postulates and Principles (English Edition)	1.00
A Statement of Basic Accounting Postulates and Principles (Spanish Edition)	1.00
Theory of Accounts in Double-Entry Bookkeeping, by Karl Käfer	2.00
The Evolution of Direct Costing, by Charles Weber	2.00
The Nature and States of Accounting Development in Latin America, by Edward Elliott	2.50
Input-Output Analysis and Its Application to Business Accounting, by Shawki Farag	2.50
The Role of Accounting in the Economic Development of England 1500–1750, by James O. Winjum*	3.00
Thoughts on Accounting, by A. C. Littleton*	3.00
Pagatoric Theory of Financial Income Determination, by Erich Kosiol*	3.00

* In preparation

TER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING

VOLUME 7, NUMBER 2, SPRING 1972

THE INTERNATIONAL JOURNAL OF ACCOUNTING

EDUCATION AND RESEARCH

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

CENTER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING OF THE COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION

The Center for International Education and Research in Accounting was established to foster the international development of education and research in the accounting discipline, to provide a base for the international exchange of ideas and materials relating to accounting education, to encourage and assist both accounting faculty personnel and students from other countries to come to the University of Illinois for study and research in accounting, and to provide faculty members for assignment to universities in other countries.

The Center, functionally and administratively, is a constituent part of the Department of Accountancy and the College of Commerce and Business Administration of the University of Illinois. The graduate training of a substantial number of international students has been an important activity of the Department for many years.

One of the specific goals of the Center is the publication of reports, booklets, and monographs which further the cause of advanced education and research in accounting.

V. K. Zimmerman, *Director*

The International Journal of Accounting *Education and Research* is published semiannually, spring and fall, by the Center for International Education and Research in Accounting, College of Commerce and Business Administration, University of Illinois. Subscription rates are $3.00 per year. Single copy price is $1.80. Copies of prior issues are still available.

Manuscripts and communications for the Editor and business correspondence should be addressed to **The International Journal of Accounting** *Education and Research*, 320 Commerce West, University of Illinois, Urbana, Illinois 61801.

THE INTERNATIONAL JOURNAL OF ACCOUNTING

EDUCATION AND RESEARCH

Volume 7 · Number 2 · Spring 1972

CENTER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

A Note from the Editor

The majority of the articles in this issue of *The International Journal of Accounting Education and Research* were presented by the speakers at an International Seminar on Accounting sponsored by Bowling Green University in the spring of 1971. Professors Edwin Bomeli and Wayne Johnson were instrumental in arranging the seminar and in collecting the written manuscripts of the speakers.

The Center is pleased to provide a forum for these speeches as they relate to topics of interest to the widening applications of accounting. This issue represents a new dimension of the Center's program and we hope it will facilitate a future exchange of views relating to the international aspects of contemporary accounting.

V. K. Zimmerman

Urbana, Illinois

Contents

Two Decades of Change in Foreign Subsidiary Accounting and United States Consolidation Practices

ALBERT AMEISS*

In the announcement of topics for this seminar two titles attracted me as indicative of the changing scene in international accounting. These were "The Multinational Executive" by Mr. George Moller and "Transnational Reporting to Investors" by Miss Beatrice Melcher. Such emphasis on a form of organizational structure, completely unheard of in international accounting twenty years ago, dramatizes one of the many developments having a significant impact on foreign subsidiary accounting and United States consolidation practices. Today I would like to review very briefly twenty years of evolution, using the results of surveys made in 1950 and 1970, of the consolidation of foreign subsidiary accounting operations.

Included in this report are the effects of changes in the social and economic framework of European countries reflected in legislation and tax rules during the past twenty years and recent procedures by which

---

* Albert P. Ameiss, Ph.D. in Business Administration, is associate professor of accounting with the University of Missouri — St. Louis School of Business Administration. His extensive research in international accounting includes an investigation of foreign subsidiary accounting practices and accounting principles. Starting his business career in public accounting, Dr. Ameiss couples over twenty years of diversified experience in financial management with extensive teaching at the university level, having lectured in accounting courses at Washington University and St. Louis University before coming to the University of Missouri — St. Louis in 1968. Dr. Ameiss also holds a joint appointment as assistant professor in administrative and data processing management at the University of Missouri School of Medicine, Missouri Institute of Psychiatry, St. Louis.

United States parent corporations have attempted to work around accounting practices of foreign subsidiary countries.

FOREIGN SUBSIDIARY ACCOUNTING IN 1950

Let me take you back twenty years to the year 1950. You will remember that numerous obstacles existed after World War II which had to be overcome by the United States and those foreign countries with whom a program of multilateral trade was desired. These obstacles included, among others, international distrust, the Cold War, expropriation, political instability, unstable currencies, restrictive and often discriminatory foreign exchange controls, "blocked funds," prohibitions against investment in specific fields by foreigners, laws requiring compulsory profit sharing with labor, and many others.

From an accounting point of view, these world conditions asserted themselves in undeniable fashion. Many United States corporations found it necessary to revise their accounting policies to properly reflect the operations of foreign subsidiaries and to prepare meaningful, consolidated statements. Accounting techniques, varying drastically in different countries and in industries within those countries, had to be adapted to meet the acid test of presenting a true picture to the reader of consolidated statements.

In a very real sense, the most basic prerequisite to the presentation of foreign subsidiary operating results, the element of control, had been taken out of the hands of United States parent companies. Multitudinous restrictions interfered with effective parent company control, notwithstanding majority stock ownership. Then, as now, when practical control of a corporation ceased to exist, the operating results of that corporate entity could not be consolidated with other members of an integrated group. Specific issues confronting United States corporations in the consolidation of foreign subsidiary operations in 1950 included:

(1) whether or not to consolidate the operations of subsidiaries, subject to obstacles and restrictions enumerated above, with those of the United States parent company, and

(2) to determine criteria for the showing of foreign subsidiaries' earnings in United States' parent companies statements in the light of *availability* to the parent. For example, whether to include in consolidated income the *unremitted* earnings of foreign subsidiaries, operating under currency restrictions, was an issue confronting United States parent companies at that time.

CONSOLIDATED STATEMENTS DEFINED IN 1950

By 1950s definition, a consolidated financial statement was an instrument reflecting a view of a combined group of companies, under single control, as if it were one enterprise. Its preparation was predicated on the presumption that the parent company possessed power to direct the flow of earnings of each subsidiary in the consolidated group, either by way of dividend distributions, reinvestments in plant, or otherwise.[1] This "power to direct," constituting the element of "control," was the dominant criterion in answering the question of consolidation or nonconsolidation of the foreign subsidiary's operating results. That principle of inclusion or exclusion was sought which most clearly and fairly presented the financial position and operating results of the consolidated group of companies.[2]

What were such criteria for consolidation in 1950? Mr. Albert G. Flume listed the following requirements:

> (1) The parent company and its foreign subsidiary should be in the same (or closely related) line of manufacture or trading; (2) the parent should not be merely a holding company whose earnings consist primarily of dividends from the investments made in other companies; (3) the parent should have a substantial investment in the foreign company and exercise control over its operations; (4) there must be a reasonably free interchange of money between the countries of the subsidiary and parent company; and (5) the comparative importance of the foreign subsidiary to the group as a whole must be known.[3]

It was held that if those criteria were met, the parent company would give a clearer, truer picture of the operations of the company as a whole by consolidation than it would by treating such holdings as investments, supported by separate statements of each foreign company. The stockholder would be relieved of the burden of making the consolidation for himself, as would be the case with nonconsolidation.

PRACTICAL PROBLEMS CONFRONTING CONSOLIDATION

Unfortunately, the requisites enumerated by Mr. Flume did not exist in 1950, with the partial exception of the western hemisphere. For example, the F. W. Woolworth Company had reported that although it owned more than a majority of the ordinary shares of its British company, it did not have power under British law to initiate the decla-

[1] George Wagner, "Some Problems of Consolidations as They Relate to Foreign Subsidiaries," *War Problems of Business as the Controller Sees Them* (New York: Controllers Institute of America, 1940), pp. 48–54, *passim.*
[2] Albert G. Flume, "Problems in Foreign Trade Accounting," *The New York Certified Public Accountant, 27,* 12. (December 1947): 818–23.
[3] *Ibid.*

ration of dividends.[4] Limitations of this nature curtailed the extent to which effective control could be exercised, but each parent company had to decide whether such an irritant was of sufficient importance to render integrated operations impossible. If so, the subsidiary would be dropped from consolidation and the parent's equity therein classified simply as an investment, according to accepted theory at that time.[5]

Restrictions were encountered frequently which made it impossible for the assets and earnings of one unit of a previously integrated group to discharge the liabilities of other operating units of that group. Continued consolidation of such a unit's operations would result in a misleading picture. The same applied to the ban on foreign exchange exports or commodity exports; but here a closer scrutiny had to be made to prove that adjustments were not available which would be capable of overcoming the effects of such restraints. If, for example, there were restrictions on the export of funds, but not on commodities — other than the customary tariff barriers — a foreign subsidiary engaged in an extractive industry might continue to send such ores out of the country to be processed elsewhere, either by sale or further fabrication. Thus, funds or equivalent values could be received *indirectly,* circumventing the governmental restriction on the transmission of funds from the subsidiary, and permitting the continuance of effective control by the American parent company.

Another possibility was to utilize these funds (which could not be sent out of the country) within the country to purchase materials, raw or finished, and then to ship such purchases out of the country to a place where cash or other values could be obtained for them. Of course, if the export and import of commodities were restricted by government action along with the transmission of funds, this avenue of escape was closed. Yet it was argued that with both restrictions in effect, if the subsidiary's operations were continued it was usually a valid indication that integrated activity had not been destroyed and that such a subsidiary's accounts could still properly be consolidated.[6]

NEED FOR AD HOC APPROACH IN CONSOLIDATION PRACTICE

It became apparent, therefore, that no categorical yes or no answer

[4] F. W. Woolworth Company, *Annual Report for the Year Ended December 31, 1944* (New York, New York).
[5] Maurice Moonitz, *The Entity Theory of Consolidated Statements,* Monograph No. 4 (American Accounting Association, 1944), p. 36.
[6] *Ibid.,* p. 37.

could be given to the question of whether or not to consolidate in 1950. Each case in each country had to be examined in the light of its peculiar circumstances to ascertain the degree of effective control still exercised over its operations by its parent company in the United States.

The mere presence of restrictions, however, did not prevent the continuation of integrated activity and therefore continued consolidation with the parent company. This observation applied with particular force to cases in which the subsidiary operated at a loss. Accepted practice of that time required that such losses be reflected in the consolidated accounts. Unless the subsidiary had a substantial amount of net current assets, it was not particularly important whether this was accomplished through consolidation or merely by a provision on the books of the parent company.[7]

ACCEPTED CONSOLIDATION PRACTICE IN THE POSTWAR YEARS

A number of options were advanced to provide adequate disclosure of information concerning the operations of foreign subsidiaries, including the following:

1. To exclude foreign *subsidiaries* from consolidation and to furnish, in lieu thereof,
   a. statements in which only domestic subsidiaries would be consolidated; and
   b. a summary as to foreign subsidiaries, grouping their assets and liabilities, and their income and losses for the year and the parent's equity therein;
2. To consolidate domestic and foreign subsidiaries as hitherto, and to include in addition the summary described above;
3. To provide both an all-inclusive consolidated statement and one applying to domestic subsidiaries only;
4. To prepare the usual domestic and foreign consolidation and to supplement this with statements showing both the investment in and income from the foreign subsidiaries separately from those of domestic subsidiaries; and
5. To prepare consolidated statements with domestic and foreign subsidiary operations indicated both separately and consolidated.[8]

Consolidation practice in 1950 frequently separated the foreign subsidiary summary on a basis of geographical locations to permit the reader to see at a glance the status of an individual subsidiary in which he had an interest. Thus, nonconsolidated western hemisphere subsidiaries were frequently shown in one summary and European subsidiaries

[7] Wagner, *op. cit.*, p. 50.

[8] American Institute of Accountants, "Foreign Operations and Foreign Exchange," *Accounting Research Bulletin*, No. 4 (New York, 1939):30–31.

in another. Other separations were presented on the basis of function, manufacturing units being shown separately from sales subsidiaries. In the face of irreconcilable exchange fluctuations, group statements were prepared in terms of the foreign currency, with a brief resume of pertinent exchange fluctuations necessitating this showing.[9]

1950 TREND TOWARD EXCLUSION

In general, a strong temptation to exclude companies from consolidation existed in practice in 1950, encouraging the use of the group statement as a substitute. Such exclusion at that time was proper if control no longer existed, or if the inclusion of a controlled subsidiary was clearly unsatisfactory or impossible.

EXCLUSION OF FOREIGN SUBSIDIARY OPERATIONS IN PRACTICE

The exclusion of foreign subsidiaries from the consolidated group and the preparation of consolidated statements which included only domestic operations necessitated a summary to cover the excluded foreign subsidiaries. Summarized were the assets and liabilities of the latter, as well as the income and losses for the year and the parent's equity therein.

In substantial application of this procedure, Columbia Pictures Corporation in its annual report for the year ending June 30, 1949, consolidated only subsidiary companies operating in the United States, but attached a "Combined Statement of Assets and Liabilities of Subsidiary Companies Actively Operating in Foreign Territories."[10] This summary supported the figure at which the investment was carried on the consolidated balance sheet, described as follows:

Net assets of subsidiary companies actively operating in foreign territories at May 31, 1949 (see statement attached and Notes A, D)	$336,292	
Less: Cash remitted to New York subsequent to May 31, 1949, by subsidiary companies operating in foreign territories	$199,551	
		$136,741

The combined statement of assets and liabilities supporting the investment valuation of these nonconsolidated subsidiaries was set up in the following pattern:

[9] Moonitz, *op. cit.*, p. 39.

[10] Columbia Pictures Corporation and Its Subsidiary Companies, *Twenty-fifth Annual Report for the Year Ending June 30th, 1949* (New York, New York).

	Total	*British Isles*	*Other Foreign*
ASSETS			
Cash			
Accounts and Notes Receivable			
Etc..............................			
Total Assets	$2,003,807		
LIABILITIES			
Bank Loans			
Accounts Payable			
Etc..............................			
Total Liabilities	1,522,975		
Net Assets before Reserve	$ 480,832		
Deduct — Reserve for Net Assets subject to foreign exchange restrictions	144,540		
Net Assets at May 31, 1949, per Consolidated Balance Sheet (Notes A, D)	$ 336,292		

General Motors Corporation, in its annual report for the year 1947, disclosed its consolidation practice in a note to the financial statements as the inclusion in the consolidated statements (with minor exceptions) of all subsidiary companies wholly owned, or practically so, and engaged in the manufacture or wholesale marketing of its United States and Canadian products.[11]

The "Investments in Subsidiary Companies Not Consolidated" as stated on the consolidated balance sheet were supported by a schedule, in comparative fashion, for the years ending December 31, 1947 and 1946, respectively, merely itemizing the account balances of all General Motors subsidiaries not consolidated. These companies were carried "generally at cost, adjusted to include the corporation's proportion of undistributed profits and losses since acquisition, other than profits earned in certain countries having exchange restrictions." In addition, there was included in the report a summary of General Motors investments outside the United States, which listed the assets and liabilities, both current and otherwise, of consolidated foreign subsidiaries, arriving at "net assets of consolidated foreign operations." To this was added the amounts at which the investments in nonconsolidated subsid-

[11] General Motors Corporation, *Annual Report, 1947* (Detroit, Michigan), p. 42.

iaries were carried to arrive at "total investments outside the United States before deducting allocable reserves."

After deducting the "contingency and miscellaneous reserves allocable to foreign operations," an amount was reported comprising the net investment of the corporation outside the United States. The geographical divisions set up in this summary comprise three groups: (1) Canada, Mexico, and South America; (2) England, Australia, South Africa, India, Egypt, and New Zealand; and (3) all other, the component countries of which are not specifically disclosed.[12]

As indicated earlier, the primary reason for nonconsolidation of foreign subsidiaries in 1950 was the loss of effective control by the parent company over the operations of such subsidiaries. This was true in Columbia's case. In fact, the corporation took a step toward full disclosure by setting up separately those nonconsolidated subsidiaries subject to partial foreign exchange restrictions from those subject to restrictions of a more serious nature, also nonconsolidated.

With respect to the latter, a footnote to Columbia's financial statement indicated:

> The accounts of companies located in certain European and Far Eastern countries have not been included in the accompanying combined statement of assets and liabilities of subsidiary companies actively operating in foreign territories, nor in the consolidated statement of profit and loss. Reserves have been provided for the amount of the investments in capital stocks of and receivables from such companies, except for a nominal value of $1.00 for each company as set forth separately in the consolidated balance sheet.

Although not stated in the report, the location of these subsidiaries in "Certain European and Far Eastern countries" rampant with nationalization programs and stringent controls explained the exclusion of the subsidiaries from all other investments and the conservative valuation placed upon them.

"CONSOLIDATION AS USUAL" IN PRACTICE

Another illustration of postwar practice in consolidation accounting was noted in International Telephone and Telegraph Corporation's *Annual Report for 1949*. Principles of consolidation were stated in a note to the financial statements as follows:

> The consolidated financial statements include the accounts of International Telephone and Telegraph Corporation (parent company) and its subsidiaries, except manufacturing companies located in Austria, China, and Germany: American Cable and Radio Corporation and its subsidiaries; Mexican Tele-

[12] *Ibid.*, p. 36.

phone and Telegraph Company; and Shanghai Telephone Company. These companies are excluded because they operate in countries where military controls are still in existence, or where abnormal conditions prevail, or because there exist large minority stock interests.[13]

The method of presentation adopted adheres most closely to that in which the usual domestic and foreign consolidation is made, supplemented with statements showing investment in and income from foreign and domestic subsidiaries separately.

Under "Consolidated Net Income," the company's treament of devaluation was indicated as follows:

During 1949, losses reflecting the revaluation of net current assets in foreign currencies at depreciated currency values in effect at December 31, 1949, totaled $8,109,912, of which $5,483,860 was applied against consolidated earned surplus and the balance against a reserve. Starting with the devaluation of the pound sterling in September 1949, most foreign currencies were devalued during the year.

International's investments in subsidiaries *not consolidated* were presented on the balance sheet as follows:

INVESTMENTS, RECEIVABLES, AND SUNDRY ASSETS (at cost):	
Subsidiaries not consolidated:	
American Cable and Radio Corporation	$ ______
Mexican Telephone and Telegraph	______
Germany and Austria	______
Eastern Europe and Far East	______
Italy (consolidated in 1948)	______
Nationalized companies (Eastern Europe)	______
Other Investments	______
Deferred receivables and special deposits	______

Such amounts were supported by footnote 3, "Equity in Unconsolidated Subsidiaries":

The corporation's investments in American Cable and Radio Corporation and Mexican Telephone and Telegraph Company at December 31, 1949, exceeded its equity in the net assets of those subsidiaries at that date by $10,308,090 and $1,565,977, respectively. It is not practicable to obtain similar information for other consolidated subsidiaries.

CONSOLIDATION OF DOMESTIC SUBSIDIARIES — WITH SUPPLEMENT

Illustrating another of the options listed, the National Cash Register Company in its 1949 statements followed the method of consolidating

[13] International Telephone and Telegraph Corporation, *Annual Report for 1949* (New York, New York), p. 31.

domestic subsidiaries only, but attached a supplementary statement to support its report "Investment in Foreign Companies and Branches."[14] Not only countries outside the western hemisphere, but also Canada and Central and South America were included in this caption. "Accumulated earnings outside of the Western Hemisphere not remitted to the United States" were deducted from net assets to arrive at the investment figures carried in the consolidated balance sheet.

REASONS ENUMERATED FOR NONCONSOLIDATION IN 1950

The consolidation practices of Lever Brothers and Unilever Limited, disclosed in their *Annual Report and Statement of Accounts for the Year Ended 31st December 1947,* bring to light various points discussed previously. A footnote headed "Companies not consolidated" indicated the reasons for the omission from consolidation of various foreign subsidiaries:

> (a) In Czechoslovakia, Yugoslavia, Roumania and Poland our interests have been nationalized. For those in Germany, Austria, Hungary, and China, information is still insufficient. No profit or loss is included in respect of these companies. The directors are of the opinion that such losses as may subsequently be ascertained are more than covered by the reserves of the N. V. Group [the Dutch company] which, to the extent required, will be applied against the amounts invested in those countries. The provision of Florin 1,457,500 made in 1946 for estimated losses in Germany in that year is now considered to be in excess of what was required and to be sufficient to cover also the estimated losses in 1947. At 31st December 1946, subsidiaries in the Netherlands East Indies were included in this group, but accounts having now been received they are taken up in the consolidation.[15]

SUMMARY: UNITED STATES CONSOLIDATION PRACTICE IN 1950

A summary of the main points brought out in a survey of 1950 consolidation practice suggests that a majority of the United States parent corporations followed the recommendations of the American Institute of Certified Public Accountants (AICPA) of that day that only foreign subsidiaries operations in the western hemisphere be consolidated with those of United States parent companies. Exceptions were noted in that restrictions in, for example, certain South American countries, frequently were found serious enough to wrest effective control of sub-

---

[14] The National Cash Register Company, *Annual Report of 1949* (Dayton, Ohio).

[15] Lever Brothers and Unilever Limited, *Annual Report and Statement of Accounts, for the Year Ended 31st December 1947* (London, England), p. 4.

sidiary operations from the hands of the United States parent company.

In most reports studied there appeared a concise statement as to the company's consolidation policy, indicating among other things, which subsidiaries were included in the consolidation and which were not, and the reasons for this procedure. Information was included about irregularities of procedure, such as different year endings of far-flung subsidiaries, the results of foreign currency devaluations with respect to the earnings of subsidiaries affected, and the like.

Finally, although frequently not in formal statement, many companies took pains to indicate a breakdown between domestic and foreign subsidiaries as to investments and equities therein, advances thereto, dividends therefrom, and so on, usually on a geographical basis and occasionally on a functional basis as well.

UNITED STATES CONSOLIDATION PRACTICE IN THE EARLY 1970s

By way of contrast, let us look at the same scene twenty years later. Changes in United States consolidation criteria since 1950 have been substantial, with particular emphasis on foreign subsidiary operations. In addition, the major consolidation problems involving foreign subsidiaries of the postwar era have not disappeared; they have simply assumed new guises and new dimensions. In the concluding section of this report, new dimensions of such consolidation problems are considered as they appear in the early 1970s. Also discussed are the adaptive measures being taken to meet such problems by United States parent corporations with foreign subsidiaries.

One of the most important questions in international accounting today, as it was in 1950, is whether or not to consolidate foreign subsidiary operations, but for different reasons. If accounting practices in such countries differ markedly from the generally accepted accounting practices of the United States, the question of exclusion must be dealt with today just as twenty years ago when the crucial question was one of effective control in the parent company's hands.

The problem has been compounded due to the growth of the multinational enterprise which has characterized the expansion of the international business community and emphasized the need for total entity disclosure. As a result, one major departure from the postwar past is that today primary emphasis is placed on the entity's consolidated financial statements, rather than on the statements of the individual companies in the group.

TODAY'S CRITERIA FOR CONSOLIDATION

Whereas two decades ago consolidation was accepted only if effective control existed by the parent company and the risks of expropriation and currency instability were not significant, today the opposite is true: exclusion from consolidation of a subsidiary's operating results must be specifically justified.

In fact, a global view of consolidation appears appropriate for international operations. Identical treatment has been recommended for both foreign and domestic subsidiary operations for purposes of consolidation. Such being the case, the consolidation of foreign subsidiary operations in countries where accounting principles are dominated by national economic policies presents unique problems to United States parent companies if the criterion of effective control is to govern. I'll give some specifics on that a little later in the case of one country, namely Sweden.

RECENT PRONOUNCEMENTS INDICATE THAT CONTROL IS STILL ESSENTIAL FOR CONSOLIDATION

Both the American Institute of Certified Public Accountants and the Securities Exchange Commission apparently consider the element of control just as absolute a requirement for consolidation today as twenty years ago. According to Accounting Research Bulletin No. 51,[16] the usual condition for a controlling financial interest is ownership of a majority voting interest, which as a general rule means direct or indirect control ownership of over 50 percent of the outstanding voting shares of another company.

The ownership of a majority of such voting securities does not automatically qualify a subsidiary for consolidation, but neither does the absence of majority ownership of voting securities in a company justify exclusion from consolidation, if control is exercised by means other than ownership of voting securities.[17]

Accounting Research Bulletin 51 refers to the ownership of a majority voting interest as the usual but not the only condition for a controlling financial interest and therefore for consolidation. In the absence of special circumstances, where a company's operations are

---

[16] American Institute of Certified Public Accountants, *Accounting Research Bulletin*, No. 51 (New York, New York, 1951).

[17] Jack H. Fisch and Martin Mellman, "Accounting for Investments in Affiliated Companies," *Journal of Accountancy, 128*, 5 (November 1969):42.

conducted through a group of majority-owned and -controlled subsidiaries, consolidated financial statements are definitely in order. In fact, there is "a presumption that consolidated statements are more meaningful than separate statements in that they are usually necessary for a fair presentation when one of the companies in the group directly or indirectly has a controlling financial interest in the other companies."[18]

However, it is the whole entity which is involved. The major distinction is that consolidated financial statements present the entity's financial position and results of operations in substance rather than in legal form, as would a statement for a single corporation or one of its individual entities.

The Securities and Exchange Commission also recognizes that consolidated financial statements are the primary statements necessary for fair presentation. In rule 4.02 of regulation S-X, the commission indicates that the registrant shall follow in the consolidated statements principles of inclusion or exclusion which clearly exhibit the financial condition and results of operations of the registrant and its subsidiaries.

REASONS ACCEPTED FOR NONCONSOLIDATION

In practice, certain reasons are accepted for nonconsolidation of subsidiaries which may be broadly classified as follows: (1) differences between the subsidiary and the group as far as industries are concerned, which might make the consolidation less meaningful than would separate statements; (2) corporate policies militating against such consolidation; and (3) prevailing circumstances which raise questions as to whether the increase in equity in the subsidiary has in fact accrued to the group.

Differences between the subsidiary and the rest of the consolidated group might be sufficiently significant to prevent consolidation, due to differences in the nature of operations or accounting periods. While this could offer a compelling reason for not consolidating a subsidiary, the continuing trend toward corporate diversification and the increase in conglomerates and multinational enterprises mitigate against it. Accounting Research Bulletin 51 suggests that "even though a group of companies is heterogeneous in character, it may be better to make a full consolidation than to present a large number of separate statements."[19]

---

[18] *Ibid.*, p. 48.

[19] American Institute of Certified Public Accountants, *op. cit.*, paragraph 3.

NONCONSOLIDATION MAY ALSO BE DUE TO DIFFERENCES IN ACCOUNTING PRINCIPLES

Much has been written in recent years about the question of generally accepted accounting principles in the United States. Perhaps not as much attention has been directed to the differences in accounting principles between a United States parent company and its foreign subsidiary. The obvious solution to the existence of conflicting accounting principles, of course, is for the subsidiary to convert to the principles of the parent company. This is done in practice in many cases. However, in the event that it is not feasible because differences are so great as to make consolidated statements meaningless, adjustments are recommended in the parent's consolidation procedures to put the financial statements of the subsidiary on a basis comparable to that of the parent company.

Perhaps the most compelling reason for not consolidating majority-owned foreign subsidiaries is the existence of circumstances which raise questions of whether the increase in equity in the subsidiary has really accrued to the consolidated group. Control, for example, may become temporary because divestment is required by law, or, with reference to foreign subsidiaries, may not really rest with the majority owners due to foreign company acts and economic policies.

IMPACT OF NATIONAL ECONOMIC POLICIES

The effects of economic philosophies on both income determination and asset valuation are far-reaching in many if not most countries today. Tax legislation is the vehicle through which many such national economic policies find expression. For example, the impact of such tax rules on income leveling by Swedish firms was brought out through a recent survey of both Swedish and United States respondents.

Responses to the author's questionnaire reveal that distortion of income between periods on Swedish domestic books led the majority of United States parent companies to require their subsidiaries to maintain a second set of books, based on generally accepted accounting principles of the United States. Other techniques have evolved in the consolidation of foreign operating results, including the "reconciling statement" to bridge the gap between the two sets of subsidiary-maintained books.

INFLUENCE OF TAX ACCOUNTING ON THE CORPORATE BOOKS

To be availed of, tax accounting procedures must be followed in the official books of account of certain foreign subsidiaries. As a typical

case, Swedish tax legislation includes inventory write-downs, permitted by Swedish tax law to a minimum of 40 percent of cost or market, whichever is lower. Another provision is the creation of legal investment reserves which give rise to tax deductions of equal amount in the year of deposit in the official Swedish depository. Accelerated depreciation and the capability of expensing all assets with an economic life of three years or less are also permitted.

REASONS FOR DIFFERENCES IN ACCOUNTING PRACTICE

Basic causes for such tax-ordained accounting practices are found in Sweden's national economic policies of stabilization. These aim for the elimination of unemployment and the maintenance of the economic substance of Sweden's industry by removing the effects of violent fluctuations in profits and losses.

INCOME LEVELING NO BARRIER TO CONSOLIDATION

However, according to the author's survey, such foreign subsidiary accounting practices, considered unacceptable by United States parent companies, did not prevent their consolidation. The underlying philosophy of many United States parent companies was found to be that of obtaining full tax concessions under the domestic tax legislation of their foreign subsidiaries. Yet adherence to generally accepted American accounting principles was accomplished by a second set of books, making consolidation possible.

REQUIREMENT FOR A STATEMENT OF PRINCIPLES OF CONSOLIDATION

As far as recent practice in the United States is concerned, the General Motors Corporation annual report of 1970 outlined the principles of consolidation followed by the company for the year ended December 31, 1970. Contained in a note to the financial statements, the principles of consolidation followed include the consolidation of all subsidiary companies, domestic and foreign, engaged in manufacturing or wholesale marketing operations. A spearate schedule is shown for the foreign operations from sources outside the United States and Canada included in the consolidated financial statements.

Reference is also made in the footnotes to a general reserve applicable to foreign operations established at the end of 1954 which is available to absorb extraordinary losses, such as those from discontinuing such operations in any locality either voluntarily or because of conditions beyond the corporation's control. The footnote states that there

has been no change in this reserve since its establishment. It is also significant to note in the 1970 report that the investments in subsidiary companies which are not consolidated consist of General Motors Acceptance Corporations and its subsidiaries — being limited therefore to finance and insurance companies.

Another illustration of a giant United States corporation consolidating the operations of both its domestic and foreign subsidiary companies is that of the International Business Machines Corporation. In its annual report for 1970, IBM furnishes notes to the consolidated financial statements indicating this principle of consolidation. In addition, a separate schedule is shown for foreign operations indicating the net assets employed in such operations together with a comparison of gross income and net earnings from these operations for the year compared with that of the previous year.

The B.F. Goodrich Company reported that its foreign operations consolidated into the financial statements represented about 13 percent of total consolidated income of 1965. During that year, four companies not previously included in the combined reported data were tabulated including those in Australia, Colombia, Holland, and Iran. However, the substantial number of affiliated operations in which B.F. Goodrich owns a 40 to 50 percent interest were not consolidated in the entity's balance sheet.[20]

As an indication of the new forces at work with respect to United States direct investment in Europe, Thomas J. Watson, Jr., chairman of IBM, reported that the company's wholly-owned subsidiary, IBM World Trade Corporation, which handles all manufacturing and marketing outside the United States, has increased its revenues from $372 million ten years ago, to $2.5 billion for the year ending 1969, an increase of 35 percent over 1968 and equal to 40 percent of the overall corporate total of IBM.[21] If World Trades' revenues continue to grow two-thirds again as fast as IBM's domestic revenues, by the late 1970s they would surpass them.

ACCOUNTING RESEARCH BULLETIN NO. 51: NONCONSOLIDATION DUE TO DIFFERING ACCOUNTING PRINCIPLES

As noted earlier, the latest full-length pronouncement on consolidation, Accounting Research Bulletin No. 51, stipulated material con-

[20] "The B. F. Goodrich Company" (Carter, Berlind, and Weill, Inc., New York City, New York: June 1966).
[21] "The Other IBM," *Forbes, 106,* 2 (July 15, 1970):34.

flict in accounting principles followed by the subsidiary as one of three reasons for nonconsolidation of subsidiaries. In a survey made by the author, a number of United States companies reported that they nevertheless did consolidate the operating results of foreign subsidiaries.

CONSOLIDATION POLICIES WITH RESPECT TO FOREIGN SUBSIDIARY OPERATIONS

These United States companies commented on policies followed in dealing with all foreign subsidiaries, not limiting such replies to Swedish companies. For example, Quaker Oats Company listed certain requirements for foreign subsidiary reporting to facilitate the parent's consolidation procedures.[22] These included the need to (1) provide data that, when consolidated with the parent's financial information, will result in financial statements prepared in accordance with the United States' generally accepted accounting principles; (2) conform to local governmental financial reporting requirements; and (3) permit the most advantageous tax administration in the local country.

As to the techniques followed in consolidations, financial statements of the foreign subsidiaries were generally prepared in accordance with the parent's formats and principles. No real difficulty in reconciling the parent's statements with official governmental reporting requirements of other countries was reported. However, where a difference was noted and the governmental requirements so dictated, the United States parent company's statements were expanded to permit ready identification of the items in question.

Appropriate adjustments were reportedly made in preparing consolidated financial statements so that if local rules required that tax calculations be based on actual books and financial statements, such special treatment was afforded in consolidation.

With respect to Swedish companies responding directly to our survey, Standard Radio & Telefon AB, of Stockholm, reported its treatment of the variances resulting from the preparation of statements according to both standards. Variances between the consolidation report submitted to the United States and the Swedish annual report are listed in a "reconciling statement." Discrepancies refer to allocations to general inventory reserve and deductions of worked up ad-

[22] The Quaker Oats Company, letter to the author dated December 5, 1966, signed by R. A. Bowen.

vances from inventories, affecting both the balance sheet and the income statement.[23]

Various techniques were reported for the reconciliation of differences in income of Swedish subsidiary operations when determined from two different sets of accounts, one for Swedish and one for United States reporting purposes. The Singer Company, for example, indicated that for Swedish accounting purposes, compliance is made with the Swedish law; for consolidation purposes, the balance sheet and profit and loss statements of the Swedish companies are restated on the accounting basis used in this country.[24]

The Quaker Oats Company described its procedure as a practical approach to get the maximum tax benefits under the laws of each country. If it is possible to prepare tax returns outside of the accounts, the parent company does so; if there are material differences, tax effect accounting is incorporated in the accounting statements. If local rules require that tax calculations be based on actual books and financial statements, the statements are expanded to identify the items in question and to give them special treatment in consolidation.[25]

DECENTRALIZATION APPROACH TO FOREIGN SUBSIDIARIES

A decentralized managerial approach to foreign subsidiary accounting procedures and disclosure was reported by Standard Oil of New Jersey after their review of the extent of differences (if any) between the subsidiary's domestic statements and those for consolidation purposes.[26]

Under this decentralized plan of management, the comptroller of each of the foreign affiliates advises the home office of any significant unusual local accounting practices. This approach was adopted because the management of the foreign affiliate is well informed about parent company policies and philosophy. The financial statements are certified by public accountants who are familiar with local regulations and requirements as well as the general accounting practices of the parent company. As a result, the financial statements received from more than 200 Standard Oil affiliates were consolidated in 1967 with

[23] Standard Radio & Telefon AB, letter to the author dated March 8, 1967, signed by F. Hammer, Stockholm, Sweden.

[24] The Singer Company, letter to the author dated January 18, 1967, signed by A. J. Reinhart.

[25] The Quaker Oats Company, *op. cit.*, p. 3.

[26] Standard Oil Company Incorporated in New Jersey, letter to the author dated December 22, 1966, signed by A. O. Savage.

only a few minor adjustments being applied in consolidation. Comparable decentralization was found on the part of other large multinational enterprises.

Mobil Oil Corporation reported the use of an international chart of accounts, distributed to all Mobil subsidiaries to explain the financial reporting requirements of the company.[27] The chart is of assistance to the foreign subsidiaries in preparing their financial reports in the proper manner for consolidation purposes and includes sections which:

(a) Define the various balance sheet and income statement accounts that are recommended for each subsidiary's use.
(b) Outline and explain the format in which the balance sheet and income statements should be submitted.
(c) Describe the procedures to be followed for the consolidation of accounts.
(d) Establish the principles to be used for the conversion of foreign currency amounts into U.S. dollars.

Since Mobil is incorporated in the United States, consolidated financial reports must conform with the generally accepted accounting principles of the United States. However, the foreign subsidiaries may not necessarily follow these same procedures in their local currency recording and reporting of their results, because of local statutory or tax requirements, or as a result of local accounting custom. "The procedures followed for local currency reporting do not interfere with the procedures followed for U.S. dollar reporting," according to Mobil.

PHILOSOPHY OF UNITED STATES PARENT CORPORATIONS WITH RESPECT TO TAX CONCESSIONS OF FOREIGN COUNTRIES

Most well-run foreign subsidiaries take advantage of concessions granted by foreign governments, implemented by various tax-saving techniques "that effectively 'dictate' the accounting principles to be followed on the company's legal books," according to a responding senior partner of a United States firm of certified public accountants.[28] He added that the gap must be bridged between the financial statements prepared from the books of foreign subsidiaries (maintained to comply with statutory requirements or to take advantage of certain tax concessions by foreign governments) and the financial statements that are required by the United States parent for consolidation purposes.

[27] Mobil Oil Corporation, letter to the author dated August 25, 1966, signed by C. E. Arthur.
[28] Peat, Marwick, Mitchell and Company, letter to the author dated January 10, 1967, signed by W. E. Hansen, p. 2.

Most parent companies require that foreign subsidiaries utilize some kind of permanently maintained conduit preparation of financial data required here in the United States. In most cases, this is the most practical means of overcoming the disparities between the two sets of records.

Accordingly, many United States parent organizations appear concerned with foreign statutory and fiscal accounting controls only to the extent that they can take appropriate and maximum advantage of any concessions connected therewith.[29]

PENDING AICPA ACCOUNTING RESEARCH STUDY

Pending the completion of an accounting research study on the subject of foreign investments and operations, the Accounting Principles Board has deferred consideration on this topic. Therefore, the provisions of chapter 12 of Accounting Research Bulletin No. 43, described in the first section of this report, continue in effect with respect to the consolidation of foreign subsidiaries. Nevertheless, there is a definite trend in practice toward the consolidation of foreign subsidiaries as indicated in this brief disclosure of current practice. The most frequently excluded subsidiaries are those located in countries with a history of recurring political and economic instability. Again, rule 4.02 (c) of regulation S-X cautions that due consideration should be given to the propriety of consolidating foreign subsidiary operations which are carried on in terms of restricted foreign currencies with the operations of domestic (United States) corporations.

CONCLUSIONS

With respect to consolidation practices for multinational enterprises, an international set of generally accepted accounting principles appears as nonexistent in 1971 as it was twenty years ago. Yet the consolidated statement appears to have emerged as the accepted medium of disclosure with respect to the inclusion or exclusion of foreign subsidiary operations — so hotly debated twenty years ago. Perhaps the single most important problem confronting financial statements prepared for the consolidated entity today, on the basis of generally accepted accounting principles, is one of identification. *Whose* generally accepted accounting principles are used in a consolidated statement for a multinational enterprise including corporations of many different countries?

[29] *Ibid.*

While conglomerates have been defined in various ways, one thing appears certain: widely differing businesses are controlled by one company in which the only unifying force is management itself. However, placing sole reliance on top management can be dangerous to the investor who is entitled to information about the relative profitability of the conglomerate's corporate acquisitions and its different industrial operations. This is true particularly when foreign subsidiaries and foreign operations are consolidated with the parent company.

It becomes dangerous for investors in conglomerates to focus solely on current earnings per share as a measure of performance, since improvement in this ratio can result from acquisitions, even when unreasonable prices are paid for the earnings of such subsidiaries. Shareholders may ultimately suffer losses should the future profits of conglomerate acquisitions fail to measure up to the potential paid for and this day of reckoning be postponed by continued acquisitions which appear to improve current overall earnings per share.

In Accounting Research Bulletin No. 51, disclosure of consolidation policy is called for with regard to all consolidated statements. Special consideration is required in the case of investments and foreign subsidiaries, regardless of whether they are consolidated or unconsolidated. A number of acceptable disclosure practices are given in chapter 12 of Accounting Research Bulletin No. 43, one of which is to furnish a summary of the foreign subsidiary's assets, liabilities, and income and losses, and the parent company's investment and equity therein.

As to conglomerate disclosure, Accounting Research Bulletin No. 51 recognizes that even though a group of companies is heterogeneous in character, it may be better to make a full consolidation than to present a large number of separate statements requiring the reader to construct the equity picture of the entire group himself.

Twenty years after the conclusion of World War II, accounting finds itself a tool of national policy in many countries. Through the media of tax concessions granted to domestic corporations in Europe, foreign accounting practices frequently must conform to tax accounting if the tax advantages offered are to be taken advantage of. The result is accounting which in many cases does not conform with generally accepted accounting principles of the United States. This has resulted in United States parent companies' foreign subsidiaries keeping a second set of books conforming to American generally accepted accounting practices.

In addition, the great merger movement of the past decade and a

dominant trend toward conglomeration have had a major impact on what was formerly a fairly well-settled area of accounting practice in the United States, that of consolidation accounting. The magnitude of this expansion is seen in the fact that the United States direct investment in foreign subsidiaries which totaled only $12 billion in 1946 grew to $55 billion in 1967, with 65 percent of this amount being located in the more developed nations of the world. In 1967 the annual return to United States parent companies has approximated $5 billion in the form of dividends, interest, or royalties, representing 6.3 percent of the net income of United States manufacturing companies from such foreign investments. As to the future, it has been projected that by the end of 1975 the third-largest industrial power in the world will be that of the U.S.-owned industry in Europe. In fact, in the opinion of one observer, 300 companies may control over 75 percent of the world's industrial assets.

Perhaps the spectacular growth of the multinational enterprises will lead to the development of more meaningful uniformity between countries as far as accounting principles and financial disclosure are concerned. This may be the message indicated by the current demand for supplementary statements in the case of diversified companies, showing the earnings of each division separately for the benefit of investors. If this demand carries over to the multinational enterprise, accounting differences among countries will have to be reconciled, or accounting practices eliminated which are clearly improper when compared with one selected standard, such as the generally accepted accounting principles of the United States.

If this is accomplished, a global view of the multinational enterprise may become a reality, in which domestic and foreign affiliates can be given identical treatment in consolidation and all investors in this global entity can enjoy meaningful uniformity in reporting.

Financial Planning to Avoid Tax Problems

RICHARD HAMMER*

INTRODUCTION

The following is a brief summary of what will be discussed: (1) form of organization or vehicle through which to operate a business abroad, and the tax opportunities and pitfalls involved; (2) tax-saving opportunities available to corporate taxpayers by taking advantage of the Western Hemisphere Trade Corporation and possessions corporation provisions — they do offer substantial tax savings which, amazingly enough, many taxpayers often overlook; (3) some of the tax problems arising out of Section 482 of the Internal Revenue Code,[1] a very troublesome area for tax and accounting people, but good advance planning and documentation can deter substantial Internal Revenue Service (IRS) harassment; and (4) U.S. foreign tax credit rules — a vital area of tax planning for overall tax minimization.

FORMS OF OPERATING ABROAD

Planning for the vehicle or entity through which to conduct a business abroad is one of the first decisions that the management of a U.S.

---

* Richard M. Hammer is a graduate of Princeton University and the Harvard Graduate School of Business Administration. He is a Certified Public Accountant of the State of New York and is a partner in charge of international tax for Price Waterhouse & Co. in New York. Mr. Hammer has served on many committees of the New York State Society of Certified Public Accountants and other professional organizations. He has written and spoken extensively on matters of taxation.

[1] All references in this article may be found in the current Internal Revenue Code.

company must face when embarking upon a new overseas venture. Is it more satisfactory, for example, for a U.S. company to operate in a particular country or area through a branch office or other unincorporated establishment, to form a separate U.S. subsidiary for activities in a specific geographical area, or to form a foreign subsidiary in a particular country or region? The choice here requires careful analysis of the tax and business rules in the country or countries in question as well as U.S. rules.

Management must consider the possibility that a particular foreign country may impose restrictions on investments from abroad or on the remittances of profits or capital back to the foreign investor (as must be done in Spain, Brazil, and India, for example). Often, there are explicit legal or implicit administrative restrictions on percentage of foreign equity ownership (for example, in Mexico and Japan); sometimes there are restrictions against foreign participation in certain industries — generally those considered essential to national defense; there always exist the dangers of adverse changes in the political climate. In addition to these factors, the local taxes and the U.S. tax consequences must be considered as well as U.S. balance-of-payments considerations.

It may be advisable to operate aboard through a branch, if operating losses are expected in the initial stages, as these losses can offset other (U.S.) income. A branch might later be locally incorporated, although it is probable that an advance ruling from the IRS would be required to avoid U.S. tax on the increase in value of the branch assets (under Section 367 of the Internal Revenue Code). Other U.S. tax factors beside loss offsets may also dictate the branch approach. For example, companies in the natural resources field may find a branch of a U.S. corporation advantageous because of percentage depletion and other available special tax deductions.

Of course, there are complications resulting from doing business abroad as a branch of a U.S. corporation. The corporation will no doubt have to qualify or register to do business locally, which will involve certain costs and will subject the U.S. company itself to local taxation and the filing of local tax returns. Furthermore, if the effective rate of income tax in the foreign country in question is below the U.S. effective corporate rate, there will be no benefit, in terms of tax deferral, from the lower local tax, since a U.S. corporation is subject to U.S. tax on worldwide income, including income of its overseas branches, whether or not repatriated. A real disadvantage of using

the branch form is the fact that many countries impose an additional tax on branch profits in addition to regular income taxes, a tax in lieu of a dividend withholding tax imposed on a local foreign-owned entity. Therefore, when a local withholding tax is levied not only upon the incidence of dividends paid by a local corporation but also upon branch profits as earned, a branch suffers the disadvantage of paying the withholding tax currently whereas a local company defers the withholding tax until actual repatriation occurs.

There may be no choice between establishing a foreign subsidiary or registering a foreign branch of a U.S. corporation under certain circumstances. Some countries, for example Mexico, impose prohibitions against foreigners owning real property; thus, a local entity may have to be formed to comply with local law if property is to be owned. In some cases, foreign participation in local undertakings may be required, as is the case in Japan and India and increasingly in Latin America; recent Peruvian legislation in this regard may be indicative of things to come south of the United States.

A foreign subsidiary, on the other hand, can insulate foreign earnings from U.S. taxation until such time as these earnings are repatriated, unless the foreign subsidiary's operations fall within the complicated controlled foreign corporation provisions, which good advance planning can usually avoid.

On the negative side is the fact that a foreign entity may not be included in a U.S. consolidated tax return, except a Mexican or Canadian subsidiary, nor are its dividends eligible for the special corporate dividend-received deduction.

One must therefore analyze the factors favoring a branch form and favoring the formation of a local wholly owned subsidiary in deciding how to operate abroad. Of course, a U.S. corporation may establish a jointly owned foreign venture in which each owns, for example, 50 percent with a foreign partner who is usually a person or corporation in the country of incorporation of the venture. This course of action has become increasingly attractive today for several reasons: (1) it enables a smaller U.S. business to establish a toehold abroad; (2) it divides the risk of loss and the financial requirements — and also reduces the earnings potential; (3) it avoids the possible application of the Subpart F of the Internal Revenue Code controlled foreign corporation provisions; (4) it provides local expert management or managerial assistance; (5) it insures capital gains treatment on disposition of the investment; (6) it helps a small or new foreign investor stay

within the limitations imposed by the foreign direct investment restrictions on foreign investments, that is, the balance-of-payments program of the Commerce Department; and, (7) it is a technique by which to enter those countries which require local equity participation in any corporation set up in their countries.

WESTERN HEMISPHERE TRADE CORPORATION

One of the two tax-savings opportunities mentioned earlier is the Western Hemisphere Trade Corporation (WHTC), a domestic corporation which does all of its business, other than some incidental purchases, in the western hemisphere and fulfills the following two requirements: (1) 95 percent or more of its gross income aggregated for the current and two preceding years (or for the period of existence if less) is derived from sources outside the U.S.; and (2) 90 percent or more of its gross income for the same period is derived from the active conduct of a trade or business.

If these two requirements are met, a WHTC is allowed a special deduction in computing its U.S. taxable income which is determined by applying the fraction 14/48 to its net income. (Forty-eight is the U.S. corporate tax rate.) Thus, a WHTC deduction would result in an effective U.S. tax rate fourteen percentage points below the regular rate, or 34 percent. Since the 1962 Revenue Act, which greatly curtailed the use of foreign base sales companies, the WHTC has become a rather popular vehicle.

A WHTC generally should not conduct its business through foreign subsidiaries, since the ownership of stock in subsidiaries might produce dividend income which is not income derived from the active conduct of a trade or business. Furthermore, a WHTC generally cannot manufacture goods in the United States for resale abroad, because under the U.S. source of income rules a reasonable manufacturing profit which has to exceed 5 percent of gross income, would be allocable to U.S. sources. WHTC's today are, however, frequently being used as western hemisphere export vehicles under an arrangement where they purchase goods in the United States from a parent company or other manufacturing affiliate for sale outside the United States but in the western hemisphere. This use of the WHTC works because the income on a sale of purchased personal property is deemed to arise at the place of sale, and the courts have now confirmed, after continual IRS harassment, that an export subsidiary that does no more than pass title abroad, with all its other activities and assets in the United States, can

qualify as a WHTC. Thus, many companies today use the WHTC as a distribution vehicle for the Latin American and Canadian markets.

As a domestic company, a WHTC operates under the same rules applicable to other domestic companies, except that it is entitled to the special deduction. Therefore, a WHTC may be organized or liquidated tax free, as a matter of right, without the need to obtain prior permission from the IRS as is required in the case of foreign corporations under Section 367 of the Internal Revenue Code. It may credit its foreign income tax against its U.S. tax; its dividends to another U.S. corporation are eligible for the 85 percent, or the 100 percent, dividend-received deduction. A WHTC can be included in a consolidated U.S. tax return, which can result in eliminating intercompany dividends and offsetting any losses of the WHTC against income earned by other affiliates, or vice versa. To use a WHTC today, extreme care must be taken to give the company some substance so that the IRS does not disregard its existence as it did in some recent cases which the courts sustained; a WHTC must also maintain a reasonable transfer price on goods sold to it from the U.S. manufacturing affiliate. This latter point is the Section 482 problem discussed later.[2]

POSSESSIONS CORPORATION

The other special geographic tax entity mentioned earlier was the possessions or Section 931 corporation.[3] Like a WHTC, a possessions company is a domestic corporation which meets two criteria. These are: (1) 80 percent or more of its gross income aggregated for the current year and two preceding years is from sources within a possession of the United States; and (2) at least 50 percent of its gross income for the same period is from the active conduct of a trade or business.

The use of the possessions-corporation provision does not at first seem to have much value except for the fact that the term "possession" includes Puerto Rico even though it is not a possession. A possessions corporation does not receive a special deduction, as does a WHTC; rather, it is exempt from U.S. tax on its foreign income and is only taxable on its U.S. source income, if any, and foreign source income which is received in the United States. Therefore, if this type of entity had only foreign source income and received no part of its income in the United States, it would be completely free of U.S. taxation.

---

[2] Section 482 of Internal Revenue Code.
[3] Section 931 of Internal Revenue Code.

The rules for qualification as a possessions corporation are conceptually similar to the WHTC qualification rules. The most significant characteristic of a possessions corporation distinguishing it from a WHTC is that its foreign income is not taxable in the United States. Thus, even though a U.S. corporation, it is treated more as a foreign corporation. Therefore, its dividends do not qualify for the 85 percent or 100 percent dividend-received deduction; it may not be included in a consolidated return group, and it may not itself utilize foreign tax credits.

It is considered to be a foreign corporation consistently, with one very important exception: it is still treated as domestic for determining the U.S. tax effect to its parent upon its organization, reorganization, or liquidation. Accordingly, it can be created or liquidated tax free as a matter of right without a prior Section 367 ruling.[4]

Puerto Rico, a possession for purposes of the possessions-corporation provision, has an Industrial Incentive Act which grants ten-, twelve-, or seventeen-year income tax exemptions or holidays for manufacturing and hotel operations. These exemptions can be extended in duration by applying them to only a lesser percentage of the income from the qualified operation. For example, if the possession company claims an exemption on only 50 percent of its income, it may extend the exemption for twenty, twenty-four, or thirty-four years, twice the length of the basic holiday period.

Consider this then: a U.S. corporation organizes a Delaware subsidiary to manufacture a product in Puerto Rico. This company obtains complete exemption from Puerto Rican tax for ten years under the Industrial Incentive Act, and it is also exempt from U.S. taxes as a possessions corporation because all its income is from Puerto Rican sources. After ten years of operations, the parent liquidates the subsidiary tax free in both the United States and Puerto Rico. This is a real bonanza, not a gimmick, and one that has been used and will continue to be used by many of the large and medium-sized corporations, unless Puerto Rico opts for statehood and kills the golden goose.

SECTION 482

Section 482 problems refer to a very significant area of tax problems relating to ongoing foreign operations conducted through controlled foreign entities. This is an area where careful advance planning can avoid horrendous results in the form of international double taxation.

[4] Section 367 of Internal Revenue Code.

What is this Section 482? What does it provide for? Section 482 is a one-sentence section in the Internal Revenue Code that probably packs a greater wallop than almost any other section of the code, at least insofar as it affects day-to-day international operations. Broadly, Section 482 grants to the IRS vast discretionary powers to reallocate income, deductions, allowances, and so forth, among related entities, where the parties may not (at least in the IRS's view) be dealing at arm's length with each other, in order to more clearly reflect U.S. taxable income. In other words, Section 482 governs all sorts of transactions between affiliates to prevent the arbitrary shifting of income outside the U.S. taxing jurisdiction to a foreign jurisdiction.

Beginning in 1960, the IRS, having announced its awareness of the growth in the numbers of U.S. taxpayers doing business abroad, made clear its view that many taxpayers have been avoiding U.S. tax by use of highly intricate schemes. Its policy then became to uncover these devices, and one of the primary weapons in its arsenal has been Section 482.

Section 482 then became a means by which the IRS could reallocate gross income to a U.S. taxpayer from its foreign affiliates or reallocate deductions from the U.S. party to the foreign entities in cases in which it believed that the taxpayer was shifting profits outside its jurisdiction, and therefore not clearly reflecting its U.S. taxable income. Detailed regulations, absent in the earlier years, were finalized in April of 1968 and cover five specific types of intercompany situations in which income or deductions may be reallocated between affiliated parties. It should be stressed that these regulations are not restricted to intercompany transactions involving foreign entities but apply equally in dealings among related domestic entities. However, it is in the domestic foreign situation that reallocations have greater significance by subjecting income of foreign to U.S. tax entities not otherwise taxable in the United States.

The following is a review of the five specific types of transactions covered in the regulations:

(1) Loan and advances between affiliates. If no interest or inadequate interest is charged, the IRS will impute interest at 5 percent.
(2) Performances of services by one affiliate for another. Allocations will be made, if no charges are made within the group, by allocating the cost of services (deductions therefor) from the servicing affiliate to the recipient. (Incidentally, if the service rendered is part of the servicing affiliate's regular profit-making activities, as for example an

advertising agency doing advertising copy for an affiliate, then the recipient affiliate must be charged a full arm's length price — cost plus profit.)

(3) Use by one affiliate of tangible property owned by another. If no rent is charged, the regulations set forth a formula for use by the IRS in imputing a rental charge; however, the taxpayer may also use the formula for setting his intercompany rental charge.

(4) Transfer or use of intangible property between affiliates. Here if no royalty or consideration is charged, the IRS may impute one by reference to facts and circumstances.

(5) Sales of tangible property between affiliates. This is the stickiest area of all under Section 482. Here the regulations go into great detail in establishing three theoretical methods for IRS guidance in arriving at an arm's length billing price. These are: comparable uncontrolled price method, resale price method, and cost plus method.

The Treasury Department is presently restudying these intercompany pricing rules because they are proving difficult to work with. A recent tax court case, Huber Holmes, has cast some doubt upon the validity of these regulations, but there is reason to believe that the Huber Holmes decision will be appealed by the government and overturned.

A question that always comes to mind in this area is the meaning of *related parties*. When will an entity, that is, a foreign entity, be related to another entity so that IRS can invoke Section 482? There is no clear answer here; the statute and regulations do not set forth a percentage test but speak in terms of effective control. Thus it is possible that where a U.S. parent owns 30 percent of a foreign company, with the remainder spread out among the foreign public, effective control of this foreign company in the Section 482 sense exists. It is interesting to note that the courts have twice held, the last time in a 1970 case, that a company which was owned by two unrelated corporations, each of which owned 50 percent, was related to neither parent for Section 482 purposes. Thus, the meaning of *related* is still somewhat murky.

One of the overriding considerations and one of the reasons why it is so important to plan in this area is the spectre of international double taxation alluded to earlier. Suppose the IRS insists that goods sold at $1.00 by a U.S. corporation to its German subsidiary should have been sold at $1.50 and proposes an adjustment which will subject this addi-

tional 50 cents per unit to U.S. tax. The German fiscal authorities, on the other hand, stand by the $1.00 per unit price and refuse to permit the German company to include this additional 50 cents in the cost of sales. In this situation, our poor company is in the unenviable position of paying tax on an item of income to both the United States and Germany, the combined rate of which could well equal or exceed 100 percent. This is no longer taxation but confiscation.

The same type of squeeze could result on any of the other types of intercompany transactions, royalties, interest rentals, and service charges. What does one do to avoid this horrendous result? Properly structuring intercorporate transactions before the fact to provide for reasonable consideration between the parties, coupled with complete documentation, is the surest way to avoid the problem; this point cannot be stressed too much. Short of that, a taxpayer is reduced to a haggling game with an IRS agent.

To conclude this discussion on Section 482, a brief look at the topic of income tax treaties or conventions follows. Such bilateral treaties have been negotiated and executed by the United States with all the developed countries of the world. In addition, each developed nation has such a treaty with each other developed nation. These treaties, in broad terms, provide exemptions from tax, or reductions in the rate of tax, levied by one of the signatory nations upon the income earned in its jurisdiction by a resident (corporate or otherwise) of the other signatory nation. These treaties are mentioned in the context of the consideration of Section 482 because they contain provisions by which the respective governments agree to consult each other to attempt to resolve by compromise an instance involving double taxation of a resident of one of the treaty countries doing business in the other country. These provisions are usually referred to as the "competent authority" and "mutual agreement" articles.

The example I used a few minutes ago involving intercompany sales from a U.S. parent to its German subsidiary at $1.00 per unit, which the IRS had concluded should have been transacted at a $1.50 per unit but which the German fiscal authorities concluded should have remained at the original price, is a perfect example of when the mutual agreement and competent authority provisions might be availed. In this case, representatives of the U.S. and German governments (the competent authorities) would meet and attempt to reach a compromise solution (mutual agreement) protecting the interest of the tax-

payer. Assuming they agreed upon a $1.25 per unit for the transfer price, a good compromise result would have been reached, double taxation would have been avoided, and the treaties would have served their purpose. For a myriad of reasons, we have had very little experience to date with these consultative provisions. In June 1970 the IRS issued for the first time a revenue procedure (70-18) advising taxpayers how to go about invoking these consultative provisions in a case involving Section 482 in which the other party, the foreign party, to the transaction is an entity of a treaty country.

FOREIGN TAX CREDIT

The U.S. foreign tax credit rules are very vital to taxpayers operating abroad in eliminating the burdens of double taxation and are the cornerstone of tax-planning efforts in the international field.

Although foreign income taxes are deductible from gross income in computing taxable income, just as are state and local taxes and other ordinary and necessary business expenses, by far the most important relief provided here is through the foreign tax credit mechanism. Domestic corporations may choose to take as a *credit* directly against the U.S. tax, rather than *deduct* from the tax base, any income, war profits, and excess profits taxes paid or accrued to a foreign country or a possession of the United States.

Planning Point Number One

The treatment of foreign income taxes as a credit rather than as a deduction nearly always results in a greater reduction of U.S. tax, simply because it is a dollar-for-dollar reduction of the tax rather than a reduction of the tax base. There may be cases, however, where the deduction would be more beneficial. For example, when U.S. net income before tax is small or nonexistent, a deduction for foreign taxes would reduce taxable income, create, or increase a net operating loss carry-back while in many cases a foreign tax credit would be of comparatively little or no benefit.

Note that a tax to be creditable must be an income tax; that is, it must be levied upon net income as defined by U.S. standards. Turnover taxes, for example, are not income taxes and only deductible at best.

There are two types of foreign tax credits available to a U.S. taxpayer; thus, taxes withheld at source on payments of royalties, interest, or dividends flowing to a U.S. corporation are direct credits since the

U.S. corporation is the legal taxpayer. A direct credit also may arise when foreign income taxes are imposed on the profits of a foreign branch of a U.S. corporation.

The deemed paid credit provisions allow a U.S. corporation to claim a credit for foreign income taxes paid directly or deemed to have been paid by a first-tier foreign corporation in which the U.S. corporation owns at least 10 percent of the voting stock. The first-tier foreign corporation is deemed to have paid a portion of the foreign income tax paid or to be paid by a second-tier affiliate, if it owns at least 10 percent of the voting stock of the second-tier subsidiary. Finally, the second-tier foreign corporation is deemed to have paid a portion of the foreign income taxes paid by a third-tier foreign corporation in which it owns at least 10 percent.

The computation of the deemed credits varies depending upon whether or not the *first-tier* subsidiary is a less-developed country corporation. If the first-tier company is not a less-developed country corporation, the dividend must be "grossed-up" (that is, increased by the amount of the deemed credit for computing the U.S. tax). The Department of the Treasury is thinking of proposing elimination of this distinction and requiring "gross-up" across the board.

Now the "gross-up" provisions will be disadvantageous if the effective rate of foreign tax is lower than the effective U.S. rate. On the other hand, if the effective rate of foreign tax is higher than the U.S. rate, "grossing-up" may be advantageous because it will tend to increase the amount of the deemed-paid tax which is available for carry-over and carry-back purposes, or which is taken into account in computing the overall limitation on foreign tax credit.

Planning Point Number Two

The deemed credits are only available if the taxpayer elects the credit; they are not deductible! Just as there are two basic types of foreign tax credit, there are two alternative methods for computing the limit on the amount of foreign tax credit claimable: the per-country limitation method and the overall limitation method. The per-country method limits the credit for each country to an amount computed by applying the effective U.S. rate (before all credits) separately to the income from each such country. The overall method limits the credit to an amount computed by applying the U.S. effective rate to total foreign source income.

Planning Point Number Three

Proper choice of limitation and its use can make a significant difference in the U.S. tax liability as well as the overall tax burden, both foreign and United States. The overall limitation allows the taxpayer to average all foreign taxes, regardless of the countries involved, in determining the maximum allowable credit and does, in fact, yield beneficial results in companies with multitudinous foreign operations. Once a corporation elects to use the overall limitation, it cannot again elect to use the per-country limitation without permission. However, the Reform Act of 1969 gave all taxpayers a one-time blanket permission to revert back to the per-country limitation from the overall limitation for 1970 because of certain technical changes contained therein relating to the foreign tax credit provisions.

The overall limitation is almost always more favorable, but in one particular circumstance election of the overall limitation may be disadvantageous. This occurs if the operations of a branch in one foreign country are unprofitable because the use of the overall limitation could limit the amount of foreign tax credit which otherwise would be available with respect to operations of the profitable branch.

When the foreign tax credit cannot be utilized fully in any one year, the excess credit may be carried back to the two preceding years and forward to the five succeeding years. Carry-backs and carry-overs cannot be made, however, from per-country limitation years to overall limitation years and vice versa.

Planning Point Number Four

Judicious use or planning for use of carry-overs can be a real money saver.

Accounting for Foreign Branches and Subsidiaries

PAUL ROSENFIELD*

The accounting research division of the American Institute of Certified Public Accountants (AICPA) has been studying two problems in accounting experienced by foreign branches and subsidiaries. The first problem is that of "translation": restatement of amounts stated in terms of foreign currency to amounts stated in terms of domestic currency.

The division studied the second problem in helping to prepare Statement Number 3 of the Accounting Principles Board (APB), *Financial Statements Restated for General Price-Level Changes.*[1] Financial statements of foreign branches and subsidiaries must be restated for general price-level changes (inflation and deflation) to include them in combined or consolidated general price-level financial statements. Should they be restated for changes in the general level of prices in the foreign countries in which they operate or for changes in the general level of prices in the country of the parent company?

Translation and restatement of foreign balances for general price-level changes have conceptual issues in common, and they will be discussed now.

PRESENT PRINCIPLES

Translation

Amounts are translated by using foreign exchange rates which

* Paul Rosenfield is a project manager in the accounting research division of the American Institute of Certified Public Accountants. He is a CPA and has a degree in mathematics and accountancy from the University of Illinois. He has published several articles in professional journals.

[1] Accounting Principles Board Statement Number 3, *Financial Statements Restated for General Price-Level Changes* (New York: American Institute of Certified Public Accountants, 1969).

change over time like any other prices. The basic question is whether rates in effect before the balance sheet date (historical rates) or rates in effect at the balance sheet date (current rates) should be used. Under present translation principles, rates are selected either by distinguishing current from noncurrent assets and liabilities or by distinguishing monetary from nonmonetary assets and liabilities. In general, current or monetary items are translated at current foreign exchange rates, and noncurrent or nonmonetary items are translated at historical rates.

Since current assets and liabilities may be nonmonetary and noncurrent assets and liabilities may be monetary, the current-noncurrent distinction results in translation rules that differ from the monetary-nonmonetary distinction. The current-noncurrent distinction has a longer history and is supported in the official literature of the AICPA.[2] The monetary-nonmonetary distinction, which was supported in a study in 1956 by Hepworth[3] and in a publication of the National Association of Accountants in 1960,[4] is gaining in practice.

Restatement

In Statement Number 3,[5] the APB recommended that restatement of foreign balances to be included in combined or consolidated general price-level financial statements be based on changes in the domestic general price level, rather than the foreign general price level. Amounts stated in terms of foreign currency are first translated into amounts stated in terms of domestic currency and then restated for domestic inflation or deflation.

APPRAISING THE PRINCIPLES

Neither the current-noncurrent distinction nor the monetary-nonmonetary distinction was developed as a basis for translation by referring to the basic nature of financial accounting or of translation. Each was developed essentially as a practical solution to pressing problems.

[2] Committee on Accounting Procedure, *Accounting Research Bulletin No. 43,* chapter 12, "Foreign Operations and Foreign Exchange" (New York: American Institute of Certified Public Accountants, 1953).

[3] Samuel R. Hepworth, *Reporting Foreign Operations,* Michigan Business Studies, Vol. 12, no. 5 (Ann Arbor: Bureau of Business Research, School of Business Administration, University of Michigan, 1956).

[4] National Association of Accountants Research Report 36, *Management Accounting Problems in Foreign Operations* (New York: National Association of Accountants, 1960).

[5] Accounting Principles Board, *Financial Statements,* par. 45, pp. 18–19.

Each seemed to work well for many items, and if the answer seemed inappropriate for an item, the distinction was abandoned and a special rule set up.[6] But Professor Sterling points out that "any theory can be saved by the simple expedient of introducing ad hoc principles every time a crisis arises . . . (and) the question is not whether it *can* be saved but whether it *should* be saved."[7]

We who are attending this seminar on "Financial Management of International Operations" should want to know what is the nature of translation in order to decide if the results can be relied on. However, we have not yet answered the question as to whether translation is legitimate, meaningful, or otherwise useful. We translate and use the results and have faith.

Examining the basic nature of translation can help us see if our faith is well placed and help us appraise particular translation principles. It can also shed light on the problem of restating foreign balances for general price-level changes. Moreover, understanding the process of uniting the financial statements of separate entities that operate in different environments using different currencies as the medium of exchange can help shed light on the nature of investment across national boundaries.

Measurement

An avenue to understanding the basic nature of translation and restatement of foreign balances for general price-level changes is to take seriously the commonplace statement that financial accounting involves measurement. The APB, for example, states that measurement in terms of money is a basic feature of financial accounting.[8] But the profession has not yet faced squarely the implications of that view.

---

[6] Accounting Principles Board Opinion Number 6, *Status of Accounting Research Bulletins* (New York: American Institute of Certified Public Accountants, 1965). In Opinion Number 6 the APB states that "translation of long-term receivables and long-term liabilities at current exchange rates is appropriate in many circumstances," a departure from the current-noncurrent distinction of the earlier pronouncements. Hepworth recommends that inventories, which are nonmonetary, that are stated at market should be translated at current rates, a departure from the monetary-nonmonetary distinction which he supports. Hepworth, *Reporting Foreign Operations,* p. 20.

[7] Robert R. Sterling, "A Statement of Basic Accounting Theory: A Review Article," *Journal of Accounting Research, 5,* 1 (Spring 1967): 97.

[8] Accounting Principles Board Statement Number 4, *Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises* (New York: American Institute of Certified Public Accountants, 1970), par. 120, pp. 45–46.

We say we measure, but we ignore measurement theory. For example, we dismiss as inconvenient the plaint of measurement theorists that measurements must be additive for their sum to have meaning.[9] If financial accounting is a measurement process, then net income is a sum of measurements. Are its components additive, or are they non-additive like forty-seven degrees centigrade and thirty-four degrees Fahrenheit? We usually do not ask. If pressed, we may even deny that financial accounting really involves measurement.[10]

Translation and restatement for general price-level changes can be described similarly if financial accounting is a measurement process: both are conversions of amounts stated in one scale of measurement to amounts stated in another scale of measurement.

Financial accounting uses monetary scales of measurement. The units of measure are called one dollar, one peso, one mark, and so forth — they have the same names as units of national currencies. But using the same name for two different things can lead to confusion, and it has in accounting. A unit of measure and a unit of money are not the same thing. Groceries cannot be bought with units of measure. The relationship between a unit of measure called one mark and a unit of money called one mark must be defined. In general price-level accounting, for example, one unit-of-measure mark is defined in terms of the power to purchase the goods and services in general that one unit-of-money mark will buy at a specified date.

In translation, the unit of measure defined in terms of a unit of foreign currency, for example, one peso, is changed to a unit of measure defined in terms of a unit of domestic currency, for example, one mark. In general price-level accounting, units of measure defined in terms of units of national currencies, for example, one peso and one mark, are changed to a single unit of measure defined in terms of a specified amount of general purchasing power, for example, the power

[9] For a discussion of the problem of additivity, see, for example, Kermit Larson and R. W. Schattke, "Current Cash Equivalent, Additivity, and Financial Action," *The Accounting Review,* Vol. XLI, No. 4 (October 1966): 634–41.

[10] Some, for example, A. C. Littleton, have consistently denied that accounting involves measurement. He states that "An asserted need for using a 'stable measuring unit' follows from an assumption of 'measurement' as the function of accounting. It is a serious matter to undertake to change function merely by changing definitions, especially when the present definition has been inherent and clearly evident throughout centuries of accounting growth in a service capacity." A. C. Littleton, "The Continuing Importance of Basic Concepts," *The International Journal of Accounting Education and Research,* Vol. 1, No. 1 (Fall 1965): 63.

to purchase the goods and services in general that one mark or one peso will buy at a specified date.

Implications for Translation and Restatement

Defining translation and restatement as measurement-conversion processes similar to conversion of amounts from ounces to grams helps appraise procedures for translation and for restating foreign balances. The author of a forthcoming research study, Leonard Lorensen,[11] defines translation in terms of conversion to a different scale of measurement, and he concludes that translation should be based on the timing of the exchanges or other transfers used as the basis of stating financial statement amounts. For example, assets stated on the basis of past exchanges should be translated at past foreign exchange rates, and assets stated on the basis of future exchanges such as long-term receivables should be translated at future rates, usually approximated by current rates. The principle developed and applied in Lorensen's research study is thus a temporal principle (based on time of transaction) rather than a classification principle (based on classification of assets and liabilities as current and noncurrent or monetary and nonmonetary).

The results of the temporal principle for translation are generally similar under present, generally accepted accounting principles to the results of the monetary-nonmonetary distinction. Most monetary items are stated on the basis of current or future exchanges and are translated at current foreign exchange rates under both the temporal principle and the monetary-nonmonetary distinction. Most nonmonetary items are now stated at historical cost or on the basis of other past exchanges, although in the future they may be stated on other bases, and are translated at past foreign exchange rates under both theories. For items in which the current-noncurrent or monetary-nonmonetary distinctions would produce results different from the temporal principle, ad hoc rules were adopted which, in practice, conform to those prescribed by the temporal principle.

Applying the definitions of translation and of restatement for general price-level changes as measurement-conversion processes leads to confirmation of the conclusion of the APB that financial statements of foreign branches and subsidiaries should first be translated and then

[11] Leonard Lorensen. *Reporting Foreign Operations of U.S. Companies in U.S. Dollars*, Accounting Research Studies No. 12 (New York: The American Institute of Certified Public Accountants, 1972).

restated for domestic inflation or deflation to include them in combined or consolidated general price-level financial statements. Demonstration of that conclusion is somewhat complicated, and I will only give the highlights here. I go through the entire exercise in the February 1971 issue of *The Journal of Accountancy.*

The main difference between conventional financial statements and general price-level financial statements is in the unit of measure. Conventional financial statements use a unit of measure that has diverse meanings in terms of general purchasing power. General price-level financial statements use a unit of measure that has a single meaning in terms of general purchasing power. A gain reported in conventional financial statements means an increase in command over monetary units, for example pesos, but not necessarily an increase in command over goods and services in general. A gain reported in general price-level financial statements, on the other hand, means an increase in command over goods and services in general.

General price-level accounting changes only the unit of measure. Other accounting principles, such as realization and expense recognition principles, are unchanged: historical costs remain historical costs, realizable amounts remain realizable amounts, and so forth.

Translating and restating foreign balances to include them in combined or consolidated general price-level financial statements should accomplish the twin purposes of general price-level accounting: the final unit of measure should represent the command over a single amount of goods and services in general, and other accounting principles used should not be changed. These purposes are accomplished only if amounts are first translated and then restated for domestic general price-level changes, as recommended by the APB. Other possible methods fail to achieve the purposes. Restating for foreign inflation or deflation and then translating leads to a final unit of measure with diverse meanings in terms of general purchasing power: the unit of measure represents a different amount of general purchasing power for each country in which the combined or consolidated group operates. The method thus has the very defect general price-level accounting is designed to overcome. Translating at rates computed by adjusting foreign exchange rates by factors intended to represent the comparative inflation in the foreign and domestic countries[12] changes accounting principles other than the unit of measure, such as the historical cost

[12] Suggested, for example, by S. R. Sapienza in "Inflation and Foreign Investments," *Financial Executive,* Vol. 31 (April 1963): 27–31.

basis. If this method were used, the amounts at which assets would be stated could only be described in terms of the procedures used and would not represent historical cost in terms of foreign currency units, domestic currency units, general purchasing power, or any other terms.

REASONABLENESS OF RESULTS

The conclusions in the AICPA's research study and Statement No. 3 of the APB on translation and restatement of foreign balances are based on relatively abstract analysis.[13] I believe the analysis is sound and supports the conclusions. Problems in financial accounting should be viewed from as many angles as possible, however, to challenge or reinforce conclusions derived by a single method.

A method of checking conclusions is to see if the results appear reasonable. This method is common in everyday life: the schoolboy who questions his answer of seventy when he divides fifty by eight and the housewife who questions the two-dollar cost of a lamb chop that sells for one dollar a pound are applying the test of reasonableness of results.

The APB elevates the test of reasonableness of results to the status of a pervasive principle, called "application of judgment by the accounting profession as a whole."[14] If many experienced accountants believe that the results of using a proposed principle are unreasonable, its support in logic or empirical tests should be carefully scrutinized. The subjective nature of this test requires that it be used with great care. The APB principle requires the profession as a whole to be dissatisfied with the results of a principle before it is modified; that is, it requires that the modification have substantial authoritative support.

As an aside, I might mention one undesirable use of the idea of reasonableness of results that I am afraid the accounting profession has not entirely avoided — that of deriving conclusions by seeing what results appear reasonable and then searching for principles to achieve the results and arguments to support the principles.

Results of Translation

The results of applying the conclusions of the AICPA's research

[13] Lorensen, *Reporting Foreign Operations,* Accounting Research Studies No. 12; and Accounting Principles Board Statement Number 3, *Financial Statements.*
[14] Accounting Principles Board, *Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises* (New York: American Institute of Certified Public Accountants, 1970), pars. 173 and 174, p. 67.

study on translation generally parallel much of current practice, although they are based on different and I believe sounder analysis. The results should appear reasonable to most accountants and should be fairly readily accepted.

Results of Restatement

The results of the principle recommended by the APB for restating foreign balances for general price-level financial statements, on the other hand, will probably appear unreasonable to many. Ignoring foreign inflation in preparing general price-level financial statements that include foreign branches or subsidiaries has already seemed unreasonable to some who have written on the subject.[15] The gist of their complaint is that changes in the general price level in the countries in which the foreign branches or subsidiaries operate affect the branches or subsidiaries and should be reflected in any financial statements that purport to deal with general price-level changes.

Answering this charge requires more than simply referring to changing units of measure. It may require considering the purposes of financial statements, the needs and interests of statement users, the nature of specific price changes and general price-level changes and their impact on enterprises and their financial statements, the nature of foreign investment, the means available to appraise foreign investment, and various indicators of success in foreign investment. I do not think that our knowledge about financial accounting, particularly in the relatively unexplored area of the objectives of financial statements, is advanced enough to reach final conclusions. I will, however, suggest some thoughts that lead me to believe that the APB principle for restating foreign balances gives reasonable results.

At the outset I would remind you that the APB principle is intended solely for preparation of combined or consolidated general price-level statements in terms of the domestic unit of money. Whether or not other principles are helpful to account for or appraise separately the status, results, or prospects of foreign affiliates or other foreign companies is not at issue.

---

[15] For example, L. S. Rosen in "Accounting Principles: Board Statement Number 3 on General Price-Level Restatements — Part I," *Canadian Chartered Accountant* (January 1970): 59; Eldon S. Hendricksen, *Accounting Theory,* rev. ed. (Homewood, Ill.: Richard D. Irwin, Inc., 1970), pp. 233–34; and Robert T. Sprouse, "Adjustments for Changing Prices," *Handbook of Modern Accounting,* ed. Sidney Davidson (New York: McGraw-Hill Book Co., 1970), p. 30, 31.

Varying Perspectives

The key to my belief that ignoring foreign inflation in restating foreign balances for combined or consolidated general price-level statements is reasonable is the fact that events can be viewed from more than one perspective. To illustrate, the battle of Waterloo was a victory from the perspective of Wellington; the same battle was a defeat from the perspective of Napoleon.

Events that involve foreign affiliates can be viewed from more than one perspective in terms of general purchasing power. For example, a foreign subsidiary holds one hundred foreign currency units while the foreign general price level doubles and the foreign exchange rate and domestic general price level remain unchanged. From the perspective of spending the foreign currency in the foreign country for goods and services in general, the change in the foreign general price level caused a loss; the one hundred foreign currency units will buy less goods and services in general in the foreign country after the foreign inflation than before. The foreign affiliate would spend the foreign currency after the foreign inflation, however, only if it anticipated receiving at least as many foreign currency units in return; the loss is in general purchasing power in the foreign country, not in command over numbers of foreign currency units.

From the perspective of exchanging the foreign currency for domestic currency to buy goods and services in general in the domestic country, the change in the foreign general price level had no effect. The foreign affiliate still has the same number of units of foreign currency and the same prospects to maintain or increase that number. The foreign currency units represent an unchanged amount of general purchasing power in the domestic country.

The disequilibrium between changes in foreign exchange rates and general price levels is the cause of the seeming paradox of a single event both causing and not causing a change in general purchasing power represented by a quantity of money.

Both perspectives cannot be presented in a single reporting system — one must be chosen. The APB principle results in reporting from the perspective of general purchasing power in the domestic country and not in the foreign country.

In my view, this is a reasonable perspective because the combined or consolidated statements are presented in terms of the domestic monetary unit presumably to statement users who are interested in the state-

ments because of their interest in domestic units of money and what they will buy — that is their perspective. My view, and it is not shared by all, is that statements are restated for general price-level changes to accommodate the perspective of the statement readers, not the enterprise. Enterprises have specific buying and selling markets. Accommodating the perspective of the enterprise in contrast to that of statement users requires specific price adjustments, not restatement for inflation or deflation.

Applying the APB principle reports all transactions of all domestic and foreign affiliates from the same perspective: increases or decreases in the command over goods and services in general in the domestic country. Any other principle injects more than one perspective into the statements and to that extent makes them self-contradictory. For example, two identical events that increase domestic general purchasing power and decrease foreign general purchasing power, one recorded on the domestic parent company's books and the other recorded on the foreign subsidiary's books, could be reported as a gain and as a loss.

The perspective is also appropriate considering the nature of foreign investment. Domestic money is invested in foreign countries in anticipation of a return of more domestic money. No foreign investment can be considered permanent unless it is a loss. The ultimate reason for making foreign as well as any other kind of investment is to increase domestic general purchasing power.

U.S. Investment and the Recipient Country

RONALD WONNACOTT*

INTRODUCTION

I wish to discuss a subject on which Canadians and Americans may have quite different views: United States investment, and I would like to explain why it raises problems for Europeans and for Canadians. This is a very complicated issue; but as a colleague of mine has observed, there is probably something to be said for trying to discuss this broad subject in a short space: like hanging, it serves wonderfully to concentrate the mind, and free it from subtlety and complication. So, I will be simplifying the issue greatly; on the other hand, it is sufficiently complex to require some arguments that can only be understood with hard thought.

I believe the key fallacy in the discussion of foreign investment is that it is a zero sum game: that is, what one country gains, the other loses. Thus, the return flow of earnings to the investing country is erroneously viewed by the recipient as a profit drain that cannot continue, or at the extreme, as a sort of economic bloodletting which will eventually bankrupt the recipient country. No sense can be made of the issue of foreign investment unless it is first understood that it is generally a mutually profitable enterprise. Earnings accrue to the

* Ronald J. Wonnacott received his doctoral degree from Harvard University. Currently Dr. Wonnacott is professor and chairman of the Department of Economics of the University of Western Ontario. He is the author or coauthor of several books including: *Canadian-American Dependence: An Interindustry Analysis of Production and Prices, Free Trade Between the United States and Canada: The Potential Economic Effects, Introductory Statistics,* and *Econometrics.*

U.S. investing firm; to the recipient country, there are also clear advantages:

1. tax receipts on the profits of the foreign investor;
2. the introduction of more advanced technology into the recipient country;
3. higher wages to the labor force in the recipient country, as new foreign-financed industries bid up wages of the domestic labor force;
4. lower prices of goods to the consumer in the recipient country (or alternatively, a larger, more varied supply of higher quality products).

These last two points require a substantial degree of competition in both the labor market and product markets in the recipient country; that is, the foreign investor can neither be a monopolist in the sale of his product or in the purchase of his labor.

It is true that one can conceive of a set of circumstances in which the foreign investor may in fact exploit the recipient country. Although I believe this to be extremely unlikely in the latter part of the twentieth century in highly developed recipient countries, here is an example of such exploitation. Suppose the foreign firm operates under a complete tax holiday. It operates as a monopsonist in the labor market, as a consequence paying unreasonably low wages, and sells its product as a monopolist, charging the public a price substantially above the international price (since we might also suppose it is protected by a tariff the recipient country has inexplicably erected around its domestic market). In other words, the foreign firm is being protected, at the expense of the domestic consumer.

In this highly contrived case, it is clear that charges of exploitation can be made. But it is also clear that the exploitation is due not only to the foreign investor, but also to the bankruptcy of economic policy in the recipient country, illustrated by the granting of a complete tax holiday and tariff protection to a monopolist. There are, of course, other possible grounds for the charge of exploitation, some applying specifically to foreign firms. For example, taxes in the recipient country may be partially avoided by transferring profits via phony pricing of sales between the parent and subsidiary. But others apply equally to foreign or domestic firms: for example, they may be polluting the water, earth, or atmosphere; or they may be extracting resources in some immoderate and socially uneconomic way. But here again we must be very careful, especially if these are renewable resources. Even if they are nonrenewable, the charge of exploiting a future generation is a difficult one — not only because it may apply to domestic as well as foreign

producers, but also because it is not even clear that the extraction of nonrenewable resources hurts future generations. If this point requires a vivid illustration, we might ask whether the British public in this generation would really be better off if the coal deposits used as the basis of the industrial revolution had been conserved in the ground until now, when they are, relatively speaking, of falling value.

In any case, the charge of exploitation by foreign capital is extraordinarily difficult to establish objectively. In the case of highly developed recipient countries — with substantial corporate taxes, and reasonably competitive labor and product markets — the presumption is that foreign investment benefits both parties. I might add that I have always found it curious that the advantages of outside investment are always much more clear to a municipality than to a nation. The municipality which is about to "land" a big industry immediately understands the advantages it will bring: broader tax base, higher wages, increased employment opportunities. It is true that these advantages are also generally recognized by a recipient nation; but are easily forgotten. Once the foreign firm is established, the recipient ceases to think in terms of having the firm or not having it, and starts to think in terms of whether or not the foreigner should own it. And if this were an alternative, anyone in the recipient country would of course prefer domestic ownership to foreign. But this is not a possibility, and once again, a muncipality is more likely to recognize this than a nation; municipalities seldom suggest that a firm owned elsewhere should leave, or be sold to residents. Where would be the alternative source of capital in the municipality? Yet in many countries it is now being suggested that foreign-owned assets should be bought back without any hardheaded analysis of how the funds may be raised domestically.

With this general review behind us, I should now like to turn to a more detailed examination of how Europeans on the one hand and Canadians on the other view U.S. investment. The question is: how can something which is as mutually beneficial as foreign investment raise so many problems? Some of these problems we shall see are real, and some are the result of fallacious reasoning. But regardless of the justice in these charges, I believe it is important for Americans to understand their origin.

THE EUROPEAN VIEW OF U.S. INVESTMENT

The current European view can only be appreciated by first understanding the intimate relationship between U.S. foreign investment and

the U.S. balance of payments deficit. To briefly review the U.S. balance of payments position: the United States has for many years had a favorable balance on *current* transactions (current account). It is true that, according to the last available figures, this surplus has shrunk; but it is by no means clear whether this is a new trend, or a temporary disturbance. In any case, the U.S. is in a strong position in the sense that she sells at least as many goods and services to foreigners as she buys from them and until very recently has enjoyed a substantial surplus. But more than offsetting this is an unfavorable U.S. balance on long-term *capital* account. The U.S. is pouring out money to other countries on capital account, by buying existing firms, establishing new firms in Europe, and so on; even taking into account the (smaller) reverse flow of foreign investment into the U.S., the result is a large U.S. capital account deficit. Moreover, this, in combination with unilateral transfers (foreign aid), is enough to throw the overall U.S. position into deficit.

This clarifies why the U.S. is doing what it is to cure its deficit. It is concentrating on restricting capital outflows because its problem arises in the capital rather than the current account; hence its guidelines to U.S. firms to limit investment aboard. The U.S. has been less concerned in limiting current account transactions since it typically has had a favorable balance on export-import flows, a position it does not wish to jeopardize. In fact, the argument that the U.S. should encourage freer trade amongst the industrial countries is to a certain degree based on the view that the greater the world trade, the greater will be the U.S. export-import surplus.

How does the U.S. cover this deficit? It may be partly covered by the sale of gold (although gold is increasingly becoming less important in the international monetary system); in large part it is covered by the sale of dollars to European individuals or official agencies (who then hold them as, say, bank deposits in New York or the Eurodollar market). Since foreign holdings of U.S. dollars are defined as part of the world's monetary reserves, the result is to increase world liquidity (indeed, in the postwar period the substantial increase in world trade has been financed by the liquidity generated by the U.S. deficit). Nevertheless, the U.S. deficit is viewed with a jaundiced eye by many European authorities, first, because their accumulation of dollar reserves increases their problem of controlling domestic inflation. Thus you often hear the charge that the U.S. is exporting its inflation. Also, they argue that the willingness of Europeans to hold dollars allows the

U.S. to run a large deficit in the form of large long-term U.S. investments in Europe. According to this argument in its strongest form, the present international monetary system allows Americans to use French money to buy up French industry.

Moreover, the present monetary system puts the U.S. in the position of being the world's banker. The essence of banking is to borrow short (at low interest) and lend long (at high interest). This is what the U.S. is doing: it borrows short when a foreigner buys dollars, leaving it in a bank account; it lends long when its firms invest in European industry.

Another important observation is that the U.S. deficit obviously does not indicate that the U.S. is going bankrupt; far from it. Its deficit is largely a reflection of the investment it is making abroad, some of which is paid for by Europeans holding dollars, but some of which has been paid for by its export-import surpluses — that is, by savings out of its high-income levels. One of the reasons the U.S. is growing wealthy so fast is precisely the international investment of its giant corporations.

Thus, the European complaint is that there is a two-way exchange in which the Europeans get unwanted dollars, and the U.S. gets increased ownership in European industry. But since this is a two-way exchange, it can be ended by either party. Accordingly, it has been argued that if, say, the Germans do not like this situation they can quickly end it by ceasing to buy unwanted dollars on the foreign exchange market. However, when they back away from this market, it will cause the mark to float upward (that is, rise in value vis-a-vis the dollar), and this they have been extremely reluctant to do in any situation short of the sort of all-out crisis they have faced this past week. Thus the German authorities have unwanted dollars forced upon them because of their extreme reluctance to give up the fixed rate of exchange of the mark vis-a-vis the dollar. And it has been interesting to watch recent monetary developments; the Germans and several other European countries have been forced to suspend transactions in dollars, because this stream of unwanted dollars has been turned into a flood by speculators who believe that no matter how the Germans may want to maintain a fixed rate they will not be able to succeed.

To put the argument another way, the U.S. deficit may be viewed as a reflection of the overvaluation of the U.S. dollar (or the undervaluation of the mark and several other currencies). But the U.S. cannot devalue, since all other currencies are tied to the dollar. The only way the U.S. can achieve a de facto devaluation is if the other

countries avalue — let their currencies appreciate. If they do not, then the U.S. deficit will continue, with reluctant European authorities having to absorb dollars — and in so doing facilitating part of the heavy U.S. investment in Europe. And, as the experience with the mark two years ago and again recently has shown, an undervalued currency will eventually come under such heavy buying pressure that speculators will force its valuation upwards in any case.

It should of course be pointed out that the other cure for the U.S. deficit is a more restrictive set of domestic U.S. monetary and fiscal policies. But these the U.S. is becoming increasingly reluctant to use; a good argument on both economic and political grounds can be made for curing external disequilibrium (that is, the deficit) by external measures (adjusting exchange rates), rather than by internal (monetary and fiscal) measures.

In summary, therefore, there does appear to be some truth in the statement that the U.S. investment in Europe — in part financed by European holdings of unwanted dollars — is facilitated by the present international monetary system; but on a more sophisticated level it may be argued that it has been the European over-commitment to this fixed rate system which has helped to elevate the dollar and create the problem. Although U.S. authorities remain concerned about the deficit, I detect increasing reluctance to let this problem severely restrict policy making. In fact, it has now been suggested in responsible quarters that the U.S. views its deficit with "benign neglect": if the European countries want the U.S. deficit cured, then let them allow their currencies to appreciate. This, of course, is exactly what the Germans were forced to do for a brief period in 1969, and what the Canadians have done twice since the war.

THE CANADIAN VIEW OF U.S. INVESTMENT

This brings us to the rather special Canadian view on U.S. investment. The essential problem for Canada is one of relative size, with the North American economy so unevenly divided. Only about one-tenth of the North American population is Canadian, and in terms of economic potential Canada forms an even smaller proportion. This is the root of most Canadian problems, be they economic, political, or social. Moreover, there are no simple solutions because there is no reasonable set of government policies which will substantially change this fundamental imbalance. To illustrate with a noneconomic example: if you have a North American academic community in which there

is a free flow of professors from one country to the other, then one would expect, in the absence of any inclination by academics to return home, that their distribution would be roughly ten Americans for every Canadian in all regions of the U.S. *and* of Canada. Thus the United States academic community would be enriched by a 10 percent injection of Canadian blood while Canada would be enriched with a 90 percent injection of U.S. blood. And the problem is immediately evident: there would be few Canadians to teach Canadian history, Canadian politics, and other indigenous fields. Now, of course this is a hypothetical case; in practice there is some inclination for academics to return home or alternatively never to leave, so the ratio is far from 10 to 1. But there is still a substantial injection taking place, and one that will tend to increase as the academic profession becomes increasingly mobile. Thus, the complaints about 'brain drain' of a few years ago have given way to complaints about 'brain gain.'

To sum up: if you have a liberal, internationally oriented community (academic or otherwise), given the relative size of the two populations, it becomes very difficult to avoid Americanization of the Canadian profession. (This is not a value judgment, it is simply an observation; I personally feel there are advantages as well as disadvantages in having foreigners teaching your history and political science [the subjects in which it does matter] as well as your mathematics [where it doesn't matter]. But that is by no means the universal Canadian view.)

Essentially the same thing is happening in Canadian industry, with the growth of the international corporation and the increased mobility of industrial personnel — and of international capital flows. Canadians have always been liberal in their attitude toward international investment (indeed, much more liberal than in their attitude to international trade flows). The result is a common North American capital market recognized for example by the exemption of Canada from the U.S. interest equilization tax. Again, if all capital were competely mobile internationally, one would expect something like a 10 percent Canadian interest in U.S. industry and a 90 percent U.S. interest in Canadian industry. But like professors, dollars tend to stay at home — for example, in "small change" local investment. So the observed position is less extreme; nevertheless, in some Canadian industries U.S. ownership is now as high as 50 percent. Moreover, the natural tendency of a mobile capital market to facilitate U.S. investment in Canada has been reinforced by the fact that American and Canadian policy on the

flow of goods across the border has not been so liberal — with both countries levying substantial tariffs. The U.S. tariff has denied many international corporations a Canadian location simply because the U.S. market is not as open to producers in Toronto as it would be to producers in Detroit; hence many Canadian firms are subsidiaries of U.S. coporations. This tendency has been accentuated by the desire of many large U.S. corporations to locate branch plants in Canada behind the Canadian (and Commonwealth) tariff in order to serve these two wealthy markets. For example, auto production in Canada is by Ford of Canada rather than by a Canadian company. Thus there is recognition, even by the most extremely nationalistic spokesman on the foreign ownership issue, that trade protection has paradoxically tended to increase foreign ownership.

For several reasons, foreign investment is less attractive for Canada in this branch plant context than it would otherwise be. One disadvantage is that although Canadian subsidiaries generally enjoy considerable freedom of action, they may ultimately have to take orders from the U.S. parent. The most celebrated examples have involved the vetoing of exports to certain communist countries by Canadian subsidiaries because the officers of the parent company would have broken U.S. law, the Trading with the Enemy Act. Now in fact the pattern of Canadian economic activity has been affected little, if at all, by this restraint; but it creates a poltical issue out of all proportion to its importance. Another problem is that the Canadian economy is a small duplicate of the U.S. Capital equipment installed in Canada is similar to that of the U.S., but the smaller, more restricted Canadian market means that this equipment is not used as continuously; production runs are shorter. The result is that similar capital units are being used to generate less output or income; or put another way, for its level of income, there is an inordinate amount of capital being used in Canada because of the protected "small market" nature of the Canadian economy.

These problems do not mean that there has been none of the economic benefits I discussed earlier. For example, the general financial press has estimated that the Canadian gross national product was 3¾ percent higher in 1965 because of U.S. investment in Canada. The Canadian views on the subject tend to be polarized, depending on whether "hardheaded" economic considerations or nationalistic political considerations are emphasized. This latter group has recently become quite articulate; their major concern is that many economic

decisions crucial for Canada are not being made by Canadians. The major difficulty with this argument is that it is based on two assumptions: first, that U.S. owners do not operate in the Canadian interest, and second, that Canadian owners do. It is therefore no great surprise that many of the Canadians who initially were concerned with foreign ownership have now become concerned with ownership of Canadian industry by any group of private individuals, domestic or foreign. Thus the most articulate Canadian opponents of U.S. investment are at the extreme left wing of our socialist NDP party, this is the group which calls itself the WAFFLE. Although it is very articulate, outsiders should keep its power in perspective: it is only a subgroup in a party of limited immediate prospects. Therefore it is not going to be making policy in Canada; instead, the chief expression of its strength would be to force some shift in the position of the party in power.

The other view in Canada is the more liberal internationalist view: to a large degree the economy is to be left open while ensuring that U.S. investors act, under Canadian law, as good corporate citizens. This group believes that the "yes or no" approach to independence is naive: in this world no country enjoys independence, there are just greater or lesser degrees of international dependence. Thus, the proposals for restricting U.S. investment would at best give us only a marginally smaller degree of dependence at substantial cost; and even a WAFFLE-type socialist solution would not solve the problem since our major dependence on the U.S. and the rest of the world is for markets, not for capital. Thus if we lose access to foreign capital our national income would be reduced, but by a relatively small amount. On the other hand, if we lose our *markets* in the United States and Europe then we really are in substantial trouble, and it does not much matter who owns the capital equipment left unemployed in Canada as a consequence. Finally, this group believes that the way to increase Canadian ownership is to encourage Canadian investment rather than to discourage foreign investment. This is essentially the current Canadian government policy; even one of the most controversial recent policies (the formation of the Canadian Development Corporation) may be viewed in this light.

CONCLUSIONS

What does all this add up to, in terms of a reasonable American reaction to the hostility often encountered to U.S. capital exports?

First, it is important that we recognize that it is in our mutual interest to avoid unnecessary political confrontations, such as could occur as a result of the Trading with the Enemy Act. Second, I again draw your attention as accountants to a technical issue: the charge that profits (and hence tax payments) may be exported from Canada to the U.S. by phony pricing on the "in-house" sale of goods across the border by large corporations. I know of no hard evidence that this is a widespread abuse, but it is clearly a practice to be guarded against. Third, it is essential to understand that Canadians face a fundamental problem in the relative size of the two economies, which manifests itself in almost all economic issues (foreign investment being but one), and in many noneconomic areas as well.

Financial Control in Multinational Enterprises — The New Challenge to Accountants

GEORGE M. SCOTT*

A new business phenomenon appears to be on the threshold of significantly altering commercial patterns and management practices around the world. This same phenomenon can be expected to have a major impact on enterprise accounting and financial control systems, and on the education of managers and accountants. Ultimately its impact may be so great that it will rival the computer as a vehicle for change in the world of accounting information systems and management control.

This new phenomenon is the multinational enterprise. This article will first review several information systems and control-oriented perspectives of multinational enterprises to aid in accomplishing the two major objectives of this article.[1] These objectives are: (1) to show that

---

* George M. Scott, CPA, is associate professor of accounting at the University of Texas at Austin. He holds academic degrees from the University of Michigan and the University of Washington, and is a member of the American Accounting Association's Committee on International Aspects of Accounting Teaching and Research.

[1] As with many phenomena, the multinational enterprise may be defined in several ways, depending on the jargon of the particular defining discipline and the purpose of the definition. However, this paper will not attempt an exhaustive examination of the nature of multinational enterprises. To capture the essence of these enterprises the reader is referred to two excellent works, the first, an article by Howard Perlmutter entitled "The Tortuous Evolution of the Multinational Corporation," *Columbia Journal of World Business 4,* 1 (Jan.–Feb. 1969): 9–18. The second is a book by Jack N. Behrman, *Some Patterns in the Rise of the Multinational Enterprise* (Chapel Hill: Graduate School of Business, University of North Carolina, 1968).

multinational enterprises constitute a different economic phenomenon than has existed before on the world business scene and (2) to inform accountants about the probable impact of multinational enterprises on management and on management information systems, and derivatively on accounting, accountants, and the education of accountants.

WHAT IS THE MULTINATIONAL ENTERPRISE?

Perhaps the most important attribute of the multinational enterprise is an attitude of "multinationalism" on the part of its managers, an attitude summarized by the statement: "We are a worldwide company and in the conduct of all of our operations we keep this in mind in all ways."[2] Accountants are in a good position to understand the potential of attitudes to affect directly the nature and the efficiency of operations, because they are well aware of the effect of attitudes *about* control on the actual *process* of control — be it internal control or other forms of financial control.

Some authorities go so far as to suggest that good internal control, for example, is heavily dependent on the proper state of mind. Similarly it can be said that multinationalism results in large part from the state of mind of managers, which brings about different actions on the part of managers than would another state of mind. A multinational viewpoint results in different organizational principles being put into effect to establish the worldwide organization structure. Different corporate goals, objectives, and policies also result from a multinational attitude.[3] Furthermore, the actual mode of operations is greatly affected by an attitude of multinationalism.

Multinationalism should be contrasted with business nationalism — that is, the attitude that foreign operations are semiautonomous "appendages" or stepchild operations which are useful so long as they provide sufficient direct and immediate benefit to the parent corporation; "direct benefit" usually means profit remittances.[4] This nationalistic attitude has long been dominant in international business operations. Indeed, it is still dominant because it is only now that multi-

[2] Behrman properly notes that in fact the activities of most multinational companies are restricted at present to the countries in the North Atlantic business community. Jack N. Behrman, "The Multinational Enterprise: Its Initiatives and Governmental Reactions" (Unpublished paper, University of North Carolina, Chapel Hill, March 1971), pp. 6–8.

[3] See Perlmutter, "Tortuous Evolution," pp. 9–18, and Behrman, *Some Patterns.*

[4] Direct benefit can also mean protection of domestic markets, or retention of a major customer by following him abroad.

nationalism is coming to the forefront. One implication of business nationalism is found in the critical area of currency translation, a topic considered briefly later in this article.

The attitude of managers of multinational enterprises is quite different from that of viewing foreign operations as stepchild operations. Rather, with multinationalism, foreign operations are viewed as an integral and inseparable part of total global operations and are subject to the same management and profits remittances policies as would be domestic subsidiaries in similar circumstances. Each operation abroad has, at least in theory, the same status as an equivalent-sized domestic operation; all subsidiaries are integrated into a global network and none are appendages, with each receiving the same attention from top management as do the others.

The last statement partially defines the multinational enterprise from an organizational point of view — that is, the multinational enterprise is a global network of integrated operations. Indeed, insights into multinationalism can be gleaned by considering foreign operations from the vantage point of network theory.

From the perspective of the management process, and also from a financial control and information systems point of view, the hallmark of multinationalism is comprehensive global coordination of logistical and financial activities and resources. Comprehensive global coordination in turn implies a high degree of centralized control and decision making.

At this point considerable progress has been made toward delineating the major attributes of multinational enterprises which are of interest here. It has been indicated that the managers of multinational enterprises have a particular *attitude,* that of multinationalism. One result of the attitude of multinationalism is operations that are completely integrated into a *global network.* For accountants and other financial controllers the key aspect of global networks is *comprehensive global coordination* of activities and resources. It is the combination of financial integration and coordination which, from the point of view of accountants, sets multinational enterprises apart from other international business operations.

A MATTER OF DEGREE?

Some observers would say, "Has not there always been coordination of international activities, and therefore is not the change merely one of emphasis and of degree, and so not a real change at all?" To sup-

port this assertion they might state that one of the major incentives for international operations in the first place is to take advantage of lower tax rates abroad by a semicoordinated global taxation strategy.

There is enough truth in such a statement to make its rebuttal difficult and thus tend to hide the magnitude of the real changes inherent in multinationalism. The argument that it is a matter of emphasis and degree can be used in almost any situation and can serve as a trap for those who do not wish to recognize or acknowledge change.

Although many persons (including almost all accountants) are not interested in the future of multinational enterprises, or have not yet even heard of them, it is probable that a decade from now no one will question their impact. The mission of this article is to make accountants among the first to be aware of how multinational enterprises will affect accounting, in contrast to the slowness of accountants in the past in seeing how computers would affect accounting.

In a sense, multinationalism can be expected to be more subtle in its influence on traditional accounting than have been computers. Although accountants did not initially know how to cope with computers, at least the alarm was sounded, albeit somewhat late. But with multinational enterprises there may be no major alarm. This is partly because international business operations have been present virtually forever, and the long-time existence of international business may tend to camouflage the changes of substance which are taking place in this sphere.[5]

FINANCIAL CONTROL IN MULTINATIONAL ENTERPRISES

As has been suggested in the preceding discussion, financial control in multinational enterprises is more than control; it is financial coordination, which in turn is a combination of three ingredients. These ingredients are: (1) coordinative activities on the part of management; (2) the financial information systems necessary to support these coordinative activities; and (3) the more traditional control processes and techniques within these systems. It is reasonable to expect that accountants, both as accountants and as chief financial officers of

[5] The nature, importance, and future impact of multinational enterprises are controversial topics about which no two authorities agree in every respect, and the author is well aware that forecasting of economic events, such as predicting the future nature and role of multinational enterprises, is an activity verging on speculation. For a carefully hedged and balanced analysis of the future of multinationalism, see Raymond Vernon, "Future of the Multinational Enterprise," *The International Corporation: A Symposium,* ed., Charles P. Kindleberger (Cambridge: The MIT Press, 1970).

multinational enterprises, can play important roles in creating and using the management techniques needed for coordinative activities, in implementing and operating the global information systems of multinational enterprises, and can continue to have primary responsibility for financial control within the financial information systems.

Let us now turn to several of the problem areas in financial control — or, as it is called here, financial coordination — in multinational enterprises. For each problem area the nature of the problem, how it is affected by multinationalism, and the opportunities and challenges for accountants will be outlined.

MULTINATIONALISM AND CORPORATE ORGANIZATION

Accountants often tend to pay too little attention to organization structures of companies, particularly to the ways that corporate structures affect operations. In this area two of the most striking characteristics of the operations of multinational enterprises can be seen. These characteristics are themselves the source of problems and opportunities for accountants; additionally they indirectly affect most of the other aspects of financial coordination in multinational enterprises, some of which are examined later in this article.

The first of these different characteristics is that when multinationalism begins to be felt in a company, the foreign operations are upgraded on the organization chart. Rather than reporting to an international division, foreign subsidiaries report directly to top management at headquarters or to a regional headquarters. This promotes the twin global coordination requisites of centralized or regional planning and the ability to take action quickly and flexibly. Accountants can hope to have a major piece of the action in implementing the information and reporting systems that funnel detailed information needed for planning purposes from around the world to headquarters.

The other organizational characteristic which is different in multinationalism is that multinational enterprises are reversing a strong domestic trend toward use of a form of organization that has been widely applauded for providing excellent financial control in domestic operations: decentralized profit centers.[6] That is, multinational enter-

[6] A study of 2,658 responding U.S. companies with sales of more than $20 million each indicated that 81 percent were using some form of decentralized profit center control. See John J. Mauriel and Robert N. Anthony, "Misevaluation of Investment Center Performance," *Harvard Business Review 44,* 2 (March–April 1966): 100.

prises are recentralizing major decision-making functions so that many decisions previously made by the manager of a foreign subsidiary are made at headquarters.

This retreat from profit centers leaves a tremendous void in financial control, a void which must be filled. Just how this void is to be filled is not yet entirely certain and can be expected to vary from company to company. What is certain, however, is that accountants can have a major role here, if they are quick and innovative.

To contemplate the full implications of the movement toward centralization fills an observer with awe, particularly when it is recalled that profit centers evolved in part because of top managements' inability to directly control far-flung and complex domestic operations. Foreign operations are more far-flung and more complex, but the author has expressed himself elsewhere on the complexities of international operations and will not dwell on them here.[7] It is sufficient for present purposes to note that although information systems, communications, and management techniques have improved in recent years, these improvements have almost certainly been less than proportional to the additional complexity inherent in closely coordinated, large-scale foreign operations. Therefore the reason for global coordination must lie in recognition by managers of the increased profits which accrue to worldwide coordination in spite of the increased cost and difficulty of this coordination.

Lest the reader err in thinking in absolute rather than relative terms, it is well at this point to note that centralized and decentralized management are relative concepts, and that total centralization is as impossible as it is undesirable. Even approaching total centralized management is costly and inefficient in very large organizations. Therefore, recentralization as used here is intended to mean the finding of a new mix of centralization and decentralization of activities in multinational enterprises. In this new mix direct top management control and coordination assume a significantly more pervasive role. The particular mix established will vary from company to company, depending on such factors as the existence of particular skills and management technology, the nature of the industry, the countries of operation, the heritage of the company, and even on the personalities and other qualities of particular executives.

[7] An unpublished manuscript which is available from the author on request.

CURRENCY TRANSLATION AND MULTINATIONALISM

Previously allusion was made to how attitudes can affect operations, and currency translation provides a fascinating case in point. It has been suggested that with business nationalism the focus is on domestic operations, and foreign operations are stepchildren treated in many respects by the domestic parent company as having less than equal status with domestic operations.

Currency translation techniques reflect this preoccupation with and favoritism toward domestic operations. For currency translation approaches are used which may be called "presumptive conversion." That is, the translation methods now in use presume that managements' primary interest in translation is to see how much the foreign assets and income would be worth in dollars if actually converted into dollars, thereby disregarding the possibility that locally held resources may continue to be held locally and no conversion will take place. Thus, concern is presently with the purchasing power of foreign assets in the United States rather than with the purchasing power in a foreign country.[8]

Increasingly, however, multinational enterprises do not plan nor desire to convert either profits or assets to dollars. Their objectives in translation are primarily to (1) evaluate the results of foreign operations and the value of foreign resources in terms of their productive ability in the *local* economy, not in the U.S. economy, and (2) use translated financial information to help top management accomplish its task of global resource coordination.[9] It should also be noted here that the interest of people who receive the published domestic annual reports — primarily stockholders — should also be concerned with what the foreign assets are worth in terms of their purchasing power in the local economy, as it is there where most of these assets will be employed in production.

[8] The official position of the American Institute of Certified Public Accountants (AICPA) supports this translation approach, as do recent writings sponsored in part by the AICPA. See, for example, *Statement of the Accounting Principles Board No. 3*, paragraph 45 (June 1969). See also, Paul Rosenfeld, "General Price Level Accounting and Foreign Operations," *Journal of Accountancy, 131*, 2 (February 1971): 58.

[9] The only other U.S. authors known by this author to (implicitly) support this view of currency translation are David B. Zenoff and Jack Zwick in their text *International Financial Management* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1969), pp. 494–502.

The orientation, for purposes of translation, of valuing the assets in terms of the economy in which they will be put to productive use, which is suggested in the preceding paragraph, provides an entirely different perspective on currency translation. This perspective is viewed by many accountants as something akin to blasphemy since it casts aside accounting dogma with which accountants have been saddled for too long. However, it is not only because of the advent of the multinational enterprise with its global view of operations rather than its U.S. orientation that accountants must take a fresh look at our translation methods. Most accountants are at least vaguely aware that for some reason these archaic methods have never done their job properly; heretofore it has been difficult to pinpoint why.[10]

THE FOREIGN EXCHANGE CONTROL FUNCTION

A newly expanded and integrated financial function evolving in multinational enterprises can be called the management of foreign exchange. There have always been elements of such a function, but heretofore foreign exchange management has tended to be a divided responsibility carried out on an ad hoc basis without benefit of carefully formulated guiding principles. In multinational enterprises the function is becoming explicitly systematized and centralized with one person or group assigned the ultimate responsibility for foreign exchange strategy and action.

Although there are day-to-day housekeeping chores as a part of this function, the major and more glamorous activity is that of dealing with actual and potential devaluations and revaluations of currency. The end result is management action which tends to hedge and minimize currency exposure. The aspect of these activities which is of particular interest to accountants is the increasing complexity and comprehensiveness of the management information systems that are necessary to support this action, as well as the measuring and reporting of devaluation-caused exchange gains and losses.

The information systems aspect of foreign exchange management is related closely to the theme of multinationalism, that is, to global coordination of resources and activities. It is becoming as much the rule as the exception that major international companies now have complex systems which provide periodic information relating to sev-

[10] This discussion of currency translation is intended to be only suggestive rather than comprehensive. The author is currently conducting a research study on the topic, the results of which are expected to be published soon.

eral factors affecting currency stability. The factors reported on can be almost endless and may include: countries' foreign exchange and balance-of-payments positions; other internal and external economic conditions; statements and known positions of government leaders, high officials, out-of-office politicians, and military leaders; local bankers' and international monetary authorities' opinions and actions; the actions of other international companies with operations in the same area; and probable parity-seeking movements of related currencies, as well as dozens of other factors affecting the stability of a particular currency. Several international companies have their foreign exchange management information systems integrated with formal risk evaluation systems (however unsophisticated) which result in almost programmed management responses to particular outcomes.

The accountant, of course, always has an interest in information systems, whatever the kind. Many of the existing foreign exchange management systems, are quite crude and in need of refinement because they are so new. Even among the largest companies many do not yet have formal foreign exchange management systems, and most of the smaller ones do not. There remains a great challenge in this facet of multinationalism for accountants.

The foreign exchange management function is related to another aspect of multinational financial coordination — that of cash and working capital coordination. Foreign exchange management may be likened to an override system in that it is triggered to intervene in normal cash coordination in times of monetary crisis.

CASH AND WORKING CAPITAL COORDINATION

Multinational enterprises are moving toward the use of global or regional cash "pools" whereby operations in each of several countries draw upon a central (or regional) pool as cash is needed and replenish the pool when they have excess cash. Differences in seasons, markets, and holidays between countries increase the variability of cash flows between countries and thus enhance the benefits of this approach.

The objectives of global cash coordination are to minimize the global cash float so as to reduce capital costs, to reduce cash exposed in highly inflationary and unstable currency economies, and to ensure a supply of working capital for all operations. International banks have now streamlined their cash transfer facilities, and at least two have also created cash pool services to aid multinational enterprises with global cash coordination. This pooling type of activity is still in its infancy as

a form of international cash management, with most companies feeling their way along cautiously and with a variety of institutional impediments remaining in many countries.

Because accountants usually assume the responsibility for cash and working capital management, they are in a good position to aid the development of global cash pool systems. However the environment is different in international operations, and new techniques will need to be developed. For example, systems must be developed which consider such factors as currency restrictions and which explicitly incorporate measurement of inflation-caused real losses of working capital.

CAPITAL BUDGETING IN MULTINATIONAL ENTERPRISES

Many problem areas exist in the investment analysis processes of multinational enterprises. There are, for example, theoretical considerations relating to how to measure costs of capital. In evaluating foreign investment proposals, is the proper cost of capital that of the parent, is it the overall cost of capital for global operations, is it the cost of capital of the local project, or is it some blending of these? This and other theoretical issues have not yet been authoritatively resolved, and the actual practices of companies differ widely with respect to which investment theories are translated into practice.

Probably of more interest to accountants are the systems aspects of investment analysis by multinational enterprises. Again consistent with global coordination, these companies are developing systems to ensure that investment opportunities around the world are brought to the attention of headquarters, that consistent evaluative criteria are used for every potential investment, and that the facts of each investment are marshalled and placed on a comparable footing. Comparability is especially difficult to achieve where rates of inflation are quite different between countries.

Equally important is the nature of the evaluative criteria. The expected profit effectiveness of the individual investment often is no longer the most significant criterion. What is becoming more important is how the operation dovetails (integrates) with others around the world. That is, does it support other operations or is it in conflict with them with respect to its resource needs, and are its activities amenable to centralized coordination in concert with the activities of other operations?

For example, is the timing of a proposed project's cash needs and

excesses compatible with other operations in its region? Can its production capacity be flexible enough to provide a buffer for operations in nearby countries, or can it provide components to those other operations? Crises such as devaluations, expropriations, and imposition of trade restrictions require the utmost flexibility of operations so that production or inventory flow can be shifted immediately.

Accountants can be of invaluable aid in designing systems that ensure that all likely investment projects are considered, that the same criteria are used for each and are used on a comparable basis, and that evaluate the extent to which a project contributes to the other operations with which it is integrated.

PERFORMANCE EVALUATION IN MULTINATIONAL ENTERPRISES

The last problem area to be considered is a most vexing one. How can local managers' performances be evaluated if with central coordination these managers do not make the important decisions relating to their operations? How can the effectiveness of utilization of a subsidiary's resources be evaluated if the return on investment is applicable not only to that operation but also to headquarters as well as to other subsidiaries that have contributed significantly to profit performance? In short, how can either local managers or the local entity be evaluated if they do not constitute a true profit center?

The theoretical answer is that each (the manager and the local entity) must be judged according to the contribution each makes toward global optimization. It is in the translation of theory into practice that very severe problems are encountered. It is also precisely here where accountants have perhaps the greatest opportunity to find a role in multinationalism. The development and implementation of performance evaluation systems in multinational enterprises seem to be clearly within the province of accounting.

It seems clear that, unlike predecessor profit center systems which were largely unidimensional in that performance was evaluated primarily in terms of profit and return on investment, these new systems can be expected to be multidimensional. Probably two distinct types of comprehensive systems will operate simultaneously in an overlapping and integrated fashion. These may be termed financial and nonfinancial systems, each of which will be multidimensional.

Nonfinancial systems will measure and report such attributes as managers' attitudes, cooperation, and motivation, using surrogate mea-

sures empirically developed for the purpose. The systems will measure directly (and perhaps compare to standards) a host of other variables, such as data processing error rates, timeliness of information, effectiveness of information systems, employee turnover rates, market share, and so forth. Formulas will be developed to weight each evaluative factor.

Very sophisticated management audits will measure much of this as well as provide in-house consulting services. For the most part management auditing is presently in a rudimentary state of development. With respect to furthering the development of the management auditing aspect of performance evaluation in multinational enterprises, accountants can be especially helpful.

On the financial side, accountants will feel at ease. There is every reason to think that responsibility accounting systems, inclusive of comprehensive budgeting, will be the primary instrument in financial performance evaluation. With responsibility accounting, of course, the emphasis will be on careful development of operating plans and on the assignment of variances from the plan to the manager responsible. Profit and return on investment *per se* will have no meaning for performance evaluation — it will be the variances and their analyses which will explain and evaluate manager and entity performance.

There are several other promising approaches to performance evaluation in multinational enterprises, two of which deserve particular mention. Both involve the partial retention of profit center concepts, and the first utilizes regional profit centers. Perhaps, for example, all European operations might become one profit center. The reasoning here is that complete integration need be only on a regional basis in those situations where most interaction between affiliated companies is on a regional, rather than global, basis. Retention of regional profit centers in such situations seems sensible. However, in the long run this approach may prove to be only a way-station on the road to true globalism.

The other approach is product-line profit centers on a worldwide basis. Where facilities and personnel are clearly separable along product lines and there are strong interactions between activities relating to the same product-lines in different countries, but only weak interactions between different product-lines, the product-line profit center approach will have viability. Relatively few companies, however, have product-lines which are so separate that global product-line profit centers will be logical.

OTHER COORDINATION PROBLEMS

Several other financial problems also exist in financial control of multinational enterprises. A discourse on this topic would not be complete without considering the transfer pricing problem in international operations. However, transfer pricing will not be examined in this article partly because, although the problem has additional and very interesting wrinkles in multinational enterprises, its essential aspects are little changed from premultinational enterprise days. Also, transfer pricing is a fairly well known (though by no means resolved) problem, and the purpose here is to acquaint the reader with new financial coordination problems brought about by multinationalism.

Another accounting-related problem in multinational enterprises which will only be mentioned here is the development of transnational computer information systems. Transnational, computer-based information and communications systems are slow in being developed, because for technical and political reasons computer systems do not yet cross oceans and national boundaries efficiently. To a certain extent present opportunities for comprehensive global coordination are bounded by the slow development of computer-based, transnational communications networks; however, it is likely that within a half-decade the technological impediments to such systems will be erased. Accountants should maintain a vigil over developments in this area.

CONCLUSIONS

Multinational enterprises are different with respect to their *modus operandi,* and the characteristic of multinational enterprises most relevant to accountants is the attempt by these enterprises to coordinate their resources and activities on a global basis. Companies begin to strive toward multinationalism when their managers perceive that the advantages that can be obtained because of different cost and market environments in different countries are so great that they exceed the increased direct and indirect costs of coordination. These additional costs may include costs of more extensive information and reporting systems, and perhaps (but not necessarily) less flexible and less responsive management.

Companies trying to become multinational in the full sense of the term as used in this article are partially thwarted because global coordination requires forms of management technology that do not yet exist. As a consequence of the lack of technology and the lack of

sufficient numbers of highly skilled managers, there are no multinational enterprises that are all the way "there" yet. But a few are close.

Several of the problem areas where management and systems technology is lacking and which should be of special interest to accountants have been briefly examined in this article. The article has attempted to demonstrate that accountants are in an excellent position to help develop and implement the missing management and systems technology as much of this relates to financial information systems. By so doing, accountants would greatly expand the functions of accounting.

*The Multinational Executive: Patriot or Traitor**

GEORGE MOLLER**

Your lordship, presiding judge, ladies and gentlemen of the jury. The jury here has been selected and assembled to sit in judgment over our defendant: Mr. Goodman, who is the executive of a Canadian company, wholly owned by a United States corporation aspiring to multinational character. The jury will understand that I will have to speak under certain restraints. Not being admitted to the bar of the state of Ohio, I have been called here as an expert witness for the defense and have been assured of extraterritorial status for anything I may say which is not in complete accordance with the laws of this country. I beg your indulgence in this respect. His lordship will indicate whenever I get beyond the boundaries of politeness in my presentation to you and I beg your indulgence if I should detail to you, a jury with a high level of fundamental understanding, that which may be boring or trite.

Our defendant, Mr. Goodman, is a Canadian. He is a professional accountant and financial officer of a company operating under the

* A mock trial before an imaginary United States court.

** George Moller, D. Juris (University of Prague), Dipl. Comm. (Vienna), F.C.A., R.I.A., practiced law and was manager of a bank in Czechoslovakia. He also was employed as a public accountant (Chartered Accountant) in Toronto and served for 20 years as the Vice-President of a large world-wide U.S. corporation until his recent retirement. He is now employed as a consultant. Dr. Moller is a keen observer of the phenomenon of the multi-national corporation. As the chairman of the planning committee of the International Association of Financial Executives Institutes, he continues his interest in international financial relations. He has authored numerous papers on management, accounting, taxation and international problems, taught at McMaster University (Hamilton, Ontario), and is a frequent conference and seminar speaker.

laws of Canada. Canada is a neighbor of the United States of America. I would like to repeat a picture drawn by the present prime minister of Canada, who compared the United States to a big elephant and stated that if that big elephant grunts, Canada has an earthquake.

I wish to repeat for your sake the serious accusations which have been made by the state prosecuter (the crown attorney in Canada) against our defendant who has been apprehended on a visit to the headquarters of his parent company here in the United States and accused of a number of transgressions against the laws of the United States of America. He is accused of having violated tax laws in the United States and he may have seriously violated the balance of payment guidelines which have been issued here, not to mention the compliance with foreign exchange control regulations and the application of social concepts which are not exactly cherished here, e.g., disregarding the Trading with the Enemy Act.

CONFLICTS OF INTEREST

Let me deal with each of these conflicts of interest of which our friend and defendant has been accused. For my legal source I will rely on the article "Conflict Resolution and Extraterritoriality," by Professors Litwak and Maule (now Ottawa, Canada).

Mr. Goodman considered himself the executive of a multinational corporation, not the executive of a subsidiary of an international corporation, much less of a United States company. The difference is that a multinational corporation is presumed to have the interest of the population of the entire world in mind, and it must take this interest into consideration when making management decisions. An international corporation is, in effect, a national corporation with investments in subsidiaries and affiliated companies in other parts of the world. From a legal viewpoint, an international corporation is, therefore, a domestic corporation subject to the laws of the country in which it is incorporated and has its seat of business.

Why is Mr. Goodman before this court? Mr. Goodman is here because he was caught in a conflict of interest. He tried to abide by the precepts of a multinational corporation but is now being judged under the precepts of national corporation subject to the laws of the United States of America.

What is he then? Is he really a traitor — guilty of treason, one who is false to his trust or betrays his country or his cause? I submit that Mr. Goodman has never betrayed his country, Canada. He has never

betrayed his cause, the multinational corporation. But he could be considered guilty of disregarding the laws of the United States of America if we accept the concept that, as an executive of the subsidiary of a corporation in the United States, he owes allegiance and loyalty to the laws and legal concepts of the United States.

Let us accept the fact that multinational corporations, although widely discussed in the literature, cannot in effect exist because multinational corporations would require a concept of supranational law and a body of supranational laws which would give these corporations firm boundaries and a concept of legal existence.

We have some supranational institutions in this world, the foremost being the United Nations. But we immediately must admit that the United Nations, which significantly has its headquarters in the United States of America, has not really succeeded in establishing international and supranational law. We have a world court in the Hague which may make fourth or fifth page news. I do not remember having ever seen any headlines describing the judgments of this venerable institution. We have the International Monetary Fund (IMF) and quite a number of other international organizations, but we have no body of law of any kind which would be respected by even a majority of countries under which a multinational corporation could operate. There may be a small beginning in the European Economic Community but it does not solve our problem. Therefore, ladies and gentlemen of the jury, Mr. Goodman had really no guidelines, no moral or, still less, legal concepts to which he could have adhered when making the decisions which brought him before this high court.

Let us examine for a few minutes the issues which the prosecutor has so aptly brought into the confines of the written and venerable law of this country. The antitrust laws of this country have been violated because Mr. Goodman has advocated and was instrumental in the combine (merger) of several Canadian manufacturing companies for the purpose of export. You may not be familiar with the fact that the Canadian anticombines law, which, in many respects, is as strict and as difficult to interpret as the merger laws in this country, permits (by an amendment passed in the early 1960s) the combination of manufacturers for the purpose of becoming more efficient and effective in exporting their products. Mr. Goodman advocated and was instrumental in his company joining in such a legal combine. It is legal in Canada but not in the United States. The extraterritoriality of the Canadian company was completely disregarded by the prosecuting

attorney here in claiming that, regardless of what the Canadian Anti-combines Act may state, it is clear under the laws of this country that any combination for the purpose of fixing market participation in other countries is illegal.

Let us have a look at the economic aspects of Mr. Goodman's alleged transgression in this respect if you, the independent jury, should decide that he is guilty of a breach of the law here. His interest was to make, within the statute of Canadian law, his company a prosperous one which would yield a reasonable return on its investments. To do that, he was obligated, in my opinion, to use every avenue open to him under the laws of his country to enhance the profits of the Canadian enterprise, and to assist in making production more efficient by pooling the know-how and technology of several manufacturers in the same line. In this case these manufacturers have combined to divide between them the lines of production, so that each one could become more efficient and effective in producing the product to be exported to underdeveloped countries. We have here a clear-cut multinational aspect in the structure of the production goals and objectives of Mr. Goodman's Canadian company.

I would like to rest my case by posing the question: Has the United States of America the right to judge the actions of a company which is incorporated under the laws of Canada and has not violated these laws in any respect?

The defendant is furthermore accused of having disregarded a prohibition from the parent company preventing the Canadian company from exporting its products to a country which by some interpretation falls under the U.S. Trading with the Enemy Act. Again the question arises: Is this country to which the products have been exported really an enemy of Canada? Could it be considered an enemy in a multinational society? Is such an expression applicable to any country in an effectively regulated society not strictly divided by natural boundaries?

I would like to leave this case to your own good judgment and come to the next accusation against Mr. Goodman, which perhaps is more technical.

THE SECOND CHARGE

Mr. Goodman refused to implement a mock agreement made between his parent company and the Canadian subsidiary to pay royalties

based on a turnover basis for certain products originating from the parent company. The parent company wanted to impose this royalty on the Canadian company for the simple reason that the Canadian tax rate for corporations was 4 percent higher than the tax rate effective in the United States and that the profits of the Canadian company would be subject to 4 percent more tax than if they were transferred as royalties which are only subject to a 15 percent withholding tax in Canada recoverable in the United States. The defendant also resisted the transfer of profits in the form of interest when it would have helped the tax situation of the parent company (but not, naturally, the Canadian company) if these interest payments had been grouped with other earnings transferred from other foreign associated companies in the pool of foreign earnings for the purpose of tax assessment for the parent company in the United States.

But the worst crime of which Mr. Goodman was accused was that he did not comply with, and, in fact, knowingly resisted compliance with, the Balance of Payment Guidelines issued by the United States of America. An attempt was made, I am told, to obviate these guidelines by channeling funds to Europe which were in excess of the permissible maximum of investment abroad under the guidelines. As you all know, these guidelines provide that you may not invest more than in a certain basic period. It is not necessary to discuss this in detail here; the principle is known to you. He did not want to borrow, in Canada, money which was not needed for the Canadian enterprise and transfer it to a European-affiliated company as working capital because this European-affiliated company was unable to raise working capital in the currency of Canada for its operations.

Actually, this court should not only not find him guilty but should honorably discharge him from this accusation because he actually was obeying the guidelines as they are understood by resisting an attempt to obviate these guidelines.

He also may have been guilty of a transgression because he did not obey foreign exchange control regulations of subsidiaries in other countries (in this case, France) in permitting certain transactions to be channeled through Canada which could not be channeled directly in the exchange between Francc and the United States. He is not accused of this transgression in this court, but I mention it to show that Mr. Goodman was adhering strictly to the concepts of a multinational corporation and was trying to achieve a satisfactory performance from

each of the companies forming the multinational corporation of which his Canadian company was a part, in the interest of preserving the common goal for which a multinational corporation is supposed to strive.

Mr. Goodman, and this is the last example we want to bring before you, was advocating also the sale of shares of the Canadian corporation to Canadians to an extent which would have created at least an interested minority in the country in which his company is operating. He believed that this step, leading to the formation of a public company in Canada, would contribute to the multinational character of the corporation and would simple create a true Canadian interest in this corporation and thus assure the compliance with the Canadian interest in the execution of management responsibilities in Canada. He was doing so because there are not yet any legal restrictions in Canada on the operation of wholly owned foreign subsidiaries, and I want to place before this jury the theoretical question of whether any condemnation of Mr. Goodman would not lead to an increase in the already widespread tendencies to ask for such laws where voluntary compliance is not taking place. Is the United States really eager to bring about conditions such as in Mexico, where Mexicanization is a concept which has found widespread attention in the world and where it is virtually impossible to operate wholly owned subsidiaries of an American or any other foreign corporation?

Ladies and gentlemen of the jury, I have taken enough of your time to describe for you the motivation which led Mr. Goodman to his actions, which he took in good faith and in the unfortunately mistaken opinion that he is allowed to act and should be allowed to act as a good citizen of the world and as a good executive of a true multinational corporation. As Sir Duncan Oppenheim noted: "I do not think the fact can be hidden that there is a fear in some countries of foreign investment by big international companies, and this fear is not confined to the so-called developing countries. These anxieties are of a primarily emotive and nationalistic kind and are more likely to produce consequences directly opposed to the national interests." Mr. Sidney Rolfe also asked: "How much economic benefit does a nation give up to add to its psychological sense of security?" In answer to this question I would ask you, how much security can a Canadian company assume if you, ladies and gentlemen of the jury, should come to a verdict of guilty?

REFERENCES

Drucker, Peter F., *The Age of Discontinuity — Guidelines to Our Changing Society.* New York: Harper & Row, 1969.

Knortz, Herbert C., "Controllership in International Corporations," *Financial Executive 37,* 6, June 1969: 54–60.

Litwak, I. A. and Maule, C. J., "Conflict Resolution and Extraterritorality," *The Journal of Conflict Resolution 13,* 3, September 1969: 305–19.

Perlmutter, Howard V., "The Torutous Evolution of the Multinational Corporation," *Columbia Journal of World Business 4,* 1, January–February 1969: 9–18.

Rolfe, Sidney E., "The International Corporation," Twenty-second Congress of the International Chamber of Commerce held in Istanbul, Turkey, May 31–June 7, 1969.

Tomb, John O., "The Multinational Corporation in the Seventies," *Executive,* May 1970.

Recent Developments in International Money and Capital Markets

GUNTER DUFEY*

INTRODUCTION

It is not without reason that in almost every language there exists a saying which refers to man's inability to see the forest for the trees. Therefore, a relatively simple framework which might help to put this presentation in a proper perspective is indicated.

Much attention has been lavished on the phenomenon of the internationalization of business activities, particularly as reflected in the rise and growth of the multinational, or international, corporation. Most reasonable observers also agree that this development must be judged a good one, since the multinational corporation has shown itself to be a primary vehicle for economic growth and for concomitant increases in worldwide standards of living.

It is true that many people have certain reservations about the relative distribution of these benefits. It appears sometimes that the benefits of these economic activities accrue to those who already enjoy a relatively high standard of living, while others, who seem to need it more, appear to receive proportionately less. However, it is undeniably true that virtually everybody benefits economically in some measure, and it is doubtful whether the problem of distribution is directly linked

* Gunter Dufey is associate professor of international business at the University of Michigan. His teachings and research focus on international financial markets and on problems of finance policy in mutinational corporations. This paper is based on an address given at the Seminar on International Accounting at Bowling Green University on May 7, 1971.

to the problem of growth. It would be naive to assume that economic growth would solve all of the major world problems; however, it *does* provide a wider and more plentiful choice of goods and services.

Increasing international activities by multinational corporations requires a steady flow of capital, much of which has to cross international boundaries. At this point, there is a temptation to state flatly that there is a shortage of capital for international economic expansion. However, this can be misleading; the term *capital* is a complex one, having a physical, technical, and human side as well as a financial aspect. More often than not it is useful to separate clearly these two aspects.

There is, and always will be, a shortage of capital in the first sense, namely, a shortage of capital assets put together in such a way that the cost-benefit ratio is not only positive but high enough to compensate for the risks of committing these capital assets. In plain words, the shortage is in terms of *realizable, profitable* business projects.

On the other hand, the supply of strictly financial capital can be, and has been, much more efficiently organized, although the process is, of course, not without problems. One of the significant aspects of accounting is to provide the vital information so that financial funds and the physical capital mesh in an efficient manner.

This report deals specifically with the organization of the sources of international funds, that is, with the mechanisms which marshal international funds so they can be channeled, or rather converted, into profitable *real* capital.

SOME FUNDAMENTAL CONSIDERATIONS

The institutional framework of international money and capital markets is still shrouded with a fair amount of mystery and confusion. However, the institutions of the Eurocurrency and Eurobond markets, as they are usually called, have been with us now for approximately a decade, and we have learned quite a bit about the ways in which they operate.

The first fact to keep in mind is that money and capital markets are organized strictly along national lines. That is, one speaks of a U.S. money and capital market, a Swiss money and capital market, a French money and capital market. However, the Euromarkets are outside that framework. They owe their birth and subsequent growth to specific regulatory restrictions as well as to other marketing imperfections in the national money and capital markets. In other words, if national markets for funds were perfectly free and if funds could

be transferred freely from country to country, there would be neither a Eurodollar nor a Eurobond market.

What specific pattern of market imperfections is fundamental to the existence of these markets? In brief, the Eurocurrency market is a market for bank liabilities (deposits) and assets (loans) denominated in currencies other than that which is legal tender in the country where the financial institution which accepts these deposits and makes these loans is domiciled. Such financial institutions are usually called Eurobanks.

The next question which must be asked here is what competitive advantage Eurobanks possess over national institutions when it comes to attracting deposits and making loans in the currency of a foreign country? The answer, which is simple and complex at the same time, is that they have considerably less regulation and fewer market imperfections. Eurobanks, and international investment bankers in the Eurocapital market, are subject to less regulation because regulatory authorities are strictly national in their outlook and orientation, while these Eurofinance institutions deal almost exclusively with residents of third countries.

This principle is clearly illustrated in the following example. The Bank of England is, like any other self-respecting central bank, very much concerned with credit conditions in the United Kingdom. As long as the institutions of London borrow from people who are not residents of the United Kingdom and make loans to other foreigners in currencies other than the pound sterling, the United Kingdom's internal economic conditions remain unaffected, and the Bank of England has no reason to interfere with such activities. Also, the profits from such transactions constitute invisible export earnings which are most welcome.

The authorities of other countries, of course, act in the same way. In this respect it is of little consequence if one or more countries decide not to permit their institutions to participate in this Eurobusiness. As long as some countries allow such business to continue, the Euromarkets will prosper. In theory, one country alone is sufficient, provided it has efficient financial institutions.

In the specific case of the Eurocurrency market, there are three conditions which appear to be necessary:

(1) the absence of legal reserve requirements on deposits;
(2) neither private nor public regulation of interest rates and conditions; and

(3) some degree of freedom from exchange restrictions, particularly nonresident convertibility of the currencies involved.

The first condition permits banks to use a larger percentage of deposits for conversion into earning assets (loans), thus giving them a cost advantage over national institutions which have to keep a certain percentage of deposits in noninterest bearing assets with the central monetary authority. An example of the second condition would be Regulation Q in the United States which puts definite restrictions on interest rates that banks can pay on deposits. Private cartel arrangements which exist among local bankers in many countries also fall in this category. The third condition refers to the ability of foreigners to use their monetary assets in a country essentially without restrictions. More will be said about this point when the outlook for controls in the Eurodollar market is discussed.

There are a number of other factors which may have aided in the growth of the market, but they are usually highly overrated and may even be inconsequential. Two of these deserve specific attention because they are all too often mentioned in the current debate.

One is the U.S. balance-of-payments restrictions. It is true that these programs have eliminated the alternative of the U.S. money and capital markets for certain borrowers, particularly European governments and corporations and international activities of U.S. corporations. However, both the Eurocurrency market and the Eurobond market were quite well developed before these programs were initiated, although it cannot be denied that these restrictions may have contributed a few percentage points to the growth rate of the markets.

The other factor is the U.S. balance-of-payments deficit. The relationship between the U.S. deficit, either on an annual or on an accumulated basis, and the Eurodollar market is quite complex in specific details; but when it comes to summing up the various effects, they largely offset each other. This means, if one is to simplify, that it is much more correct to say that the state of the U.S. balance of payments has insignificant consequences on the growth of and the conditions in the Eurodollar market than to call it a significant factor. The rapidly growing German mark portion of the Eurocurrency market is a perfect illustration that a market for foreign currency deposits can develop even if the country's balance of payments shows a surplus.

As far as the U.S. balance of payments is concerned, the only *real* effect of the Eurodollar market is that it makes short-term capital

flows so much more fluid. An economist from the Federal Reserve Bank of New York likened the Eurodollar market to "a bridge over which large amounts of international funds flow most efficiently."[1]

Similar fundamental considerations apply to the Eurobond market. The basic reason for its growth and existence is the difference between the relatively tight controls exercised over security issues by foreign borrowers in national markets and the relative freedom enjoyed by national investors to purchase foreign securities. It is this asymmetry of controls which is the fundamental reason for the existence of the Eurobond market.

The following example may illustrate the situation. When Standard Oil Company of New Jersey intends to raise funds for a new refinery in France, it is unlikely to get permission to issue securities in that country. A combination of exchange controls and/or restrictions on security issues in other countries will eliminate these as alternatives. However, a group of international investment bankers, who assure their respective national authorities that they will place the securities outside their jurisdiction, is willing and able to manage this bond issue. These underwriters place the securities with investors who, for one reason or the other, are able to purchase securities issued outside their national markets.

Control over foreign issues in national markets has its corollary in the taxation of interest payments to foreign holders of domestic bonds. Almost all countries collect taxes "at the source" on interest paid to foreigners. This, of course, leads to double taxation which does not promote investment in foreign securities. Even in cases where there exist so-called double taxation treaties, the recovery of the excess tax usually involves delay and complex paper work. Eurobonds offer a better deal; these bonds are issued in such a form that they escape these "source" or withholding taxes completely.

Of course, a condition necessary, but not sufficient, is the opportunity for companies to shift funds within the various parts of their worldwide operations. It should be emphasized that this freedom does not have to be perfect (and usually is not), but there must be some opportunity for intercorporate international fund flows. The flexibility of international operations provides for this opportunity even in the face of relatively stringent foreign exchange restrictions, although it

[1] Fred H. Klopstock, "The Wiring of the Eurodollar Market," *Euromoney* (August 1970): 18.

must be clearly pointed out that complete and effective worldwide exchange controls would mean the end of the Eurobond market.

Thus, it is possible to summarize to this point: what are normally called the international capital and money markets thrive, like orchids in the jungle, in the twilight of partial restrictions and partial freedom.

CORPORATE VIEWPOINT

For the corporate finance officer of an international corporation and his counterpart, the international banker or investment banker, these fundamental considerations may appear to be academic. What they see is a broad range of alternative sources of funds which these markets offer. There is an amazing combination of maturities, currencies, and conditions available which can be used to attract funds for worldwide investment projects.

The above fundamental considerations, on second thought, are not quite so abstract as they may first appear. After all, the true meaning of the growth in the Eurodollar market, for example, is that many more loans have been made — largely to international corporations — and that many more short-term funds have been invested at relatively high rates and flexible conditions.[2]

On the short-term end of these alternatives, the spotlight during the past two years has clearly been on the Eurocurrency market. According to reasonable estimates, the total Eurocurrency pool at the beginning of the year stood at the equivalent of approximately eighty billion dollars.[3] This figure differs from the usual one provided by the Bank for International Settlements primarily because it includes the foreign currency business conducted by Canadian banks. It is worth noting that these data represent liabilities to nonresidents, denominated in foreign currency, whereby interbank deposits are excluded. Of the total, somewhat over sixty billion dollars were represented by U.S. dollars, with the rest by other currencies, particularly German marks, British pounds, Swiss francs, Dutch guilders, and Japanese yen. The nondollar component of the Eurocurrency market increased considerably faster than the dollar component. This shift, in relative terms,

[2] The credit creation process which takes place in the Eurodollar market is another theoretical issue which is only of indirect relevance for corporate financing decisions. For an analysis, see Helmut W. Mayer, *Some Theoretical Problems Relating to the Eurodollar Market,* International Finance Section, Princeton, No. 79.

[3] Morgan Guaranty Trust, Economist's Department, *World Financial Markets* (April 1971): 4.

into other currencies indicates the growing use of these currencies for international credit transactions. Thus, the market in a way antecedes plans which provide for a reorganization of the international monetary system in the direction of one which would rely on more currencies than just the dollar.

Table 1. Volume of Gross Issues of Foreign Securities[4]
(In million-dollar equivalent)

Year	*Eurobond Market*
1968	3,200
1969	2,800
1970	2,800
1971	4,000*

* Extrapolation of first-quarter volume.

In the same period, the last two years, there were also spectacular declines in interest rates in these markets. Interest rates in the dollar portion of the market dropped from the precipitous heights of 12 and 13 percent during early 1969 to around 5 percent at the present time — paralleling and reflecting the change in U.S. monetary conditions.

At this point, a brief analysis of the relation between U.S. and Eurodollar interest rates might provide an insight into this market. As long as U.S. banks used to adjust their liquidity position by borrowing in the Eurodollar market, U.S. money market rates and Eurodollar rates were very tightly linked. As a matter of fact, because of institutional quirks, such as the compensating balance requirement, Regulation Q, and others, Eurodollar rates in the past used to be the best indicator of monetary conditions in the United States. Thus in the past, when liquidity tightened, competitive reasons led the banks to borrow Eurodollars, mainly through their branches abroad. When money in the United States eased, they reduced their liabilities to these branches.

The marginal reserve requirements on Eurodollar borrowings imposed by the Federal Reserve in August of 1969, and subsequently doubled in December 1970, changed all that. These marginal reserve requirements have the effect of making Eurodollars more expensive for U.S. banks as compared with other sources of liquidity, such as

[4] The figures for Tables 1–4 are derived from *Euromoney* and from Morgan Guaranty Trust, *World Financial Markets*. All figures in Tables 1–4 are rounded to give approximate magnitudes only.

federal funds, bankers' acceptance, and certificates of deposit. Thus, should U.S. rates rise again, banks are not likely to revert to such massive Eurodollar borrowings as they did in the past.

During the period under study, monetary conditions eased in the United States and consequently Eurodollar rates responded quickly because of the repayment by U.S. banks. However, the end of this era has come, because by now U.S. commercial banks have reduced their liabilities to branches to such a low point that there is little room to maneuver; most recently, the figure was down to approximately two billion dollars from a total of over fifteen billion dollars in 1969.[5] The Federal Reserve Foreign Credit Restraint Program, of course, limits the ability of U.S. banks to invest funds in the Eurodollar market.

This brings the analysis to a very crucial question: Given the above situation, how effectively are the U.S. money market and the Eurodollar market separated?

As the banking sector is essentially limited from taking part in any arbitraging process, there remain corporations and private individuals. OFDI restrictions make adjustment through business firms sluggish. There seems, however, to be a potential for large inflows through direct borrowings by U.S. corporations from non-U.S.-owned Eurobanks,[6] if interest rates in the United States again move above those in other major countries.

Transfers by private individuals are limited due to the fact that they lack the quantities of liquid funds required for Eurodollar transactions. The institutional setup of this market is geared to large denominations only. Thus, the future will probably see a larger disparity between rates in the U.S. money market and those in the Eurodollar market, although this leeway should not be overestimated. The Federal Reserve policy is still the most important determinant of Eurodollar rates and, indirectly, of those of other European money markets. This fact prompted one foreign banker to make the now famous remark that "the Eurodollar market makes European countries nonvoting members of the U.S. Federal Reserve Board."

Wide swings in interest rates, with the uncertainty of exchange rate developments, put these international money markets to a severe test during the period under study. By all accounts they have done quite well. The range of instruments and financial arrangements was

[5] *Federal Reserve Bulletin,* Table A 86.

[6] U.S. branch banks abroad are likewise subject to the marginal reserve requirements.

significantly expanded. For instance, a tremendous amount of large revolving credit arrangements were negotiated during that time. Although the first of these "revolvers" was pioneered by IBM back in 1966, these arrangements really blossomed during the past two years. The "revolvers" usually run for a total of five years but are renewable every six months to allow for an adjustment of the interest rate. This rate is normally set at a fixed spread above the London interbank rate for the respective Eurocurrency. This spread usually amounts to somewhere between half a percentage point and 1.5 percent. The size of these "revolvers" can range up to $120 million and more.

Another innovation was the issue of Eurocommercial paper. The first issue was made in mid-1970, and several issues have since come on the market. A fledgling secondary market has developed. However, this attempt at financial disintermediation is not without problems in the Eurodollar market, in part because the spreads between lending and borrowing rates in the Eurodollar market are more competitive than in national money markets.[7]

Finally, during the past two years the Eurodollar negotiable certificate of deposit has gained respectability, and the total volume outstanding might well amount to somewhat over four billion dollars by now.

So far, the analysis has dealt with the Eurocurrency market, that is, where the basic instrument is always a foreign currency deposit in a bank, at least indirectly as in the case of Eurocommercial paper.

The transition to the Eurobond market is fluid. For a corporate treasurer there is little difference between five-year notes with floating rates and a five-year "revolver." However, it should be remembered that there is a significant difference in the underlying reasons for the existence of the Eurocurrency market on one hand and the Eurobond market on the other.

A total of roughly sixteen billion dollars has been raised in the latter market. During the past two years, its flexibility and resilience was strained because of record interest rates, accelerating rates of inflation, and uncertainty about the role of the U.S. dollar in the international monetary system.

How has the market responded to these conditions? First, the overall volume of issues, which had reached approximately three and one-half billion dollars in 1968, dropped to somewhere slightly under three

[7] H. Lee Silberman, "The Euro-Commercial Paper Caper," *Finance* (October 1970): 23–26.

billion dollars in 1969 and 1970. However, if the first quarter of the current year is at all indicative of the future development, 1971 might well see a record volume of four billion dollars. (See table 2.)

Table 2. Eurobonds: Corporate vs. Public Issues (In million-dollar equivalent)

Year	Eurobonds Total	Corporate Total	Corporate Percent	Public Total	Public Percent
1968	3,200	2,900	88	400	12
1969	2,800	2,200	79	600	21
1970	2,800	2,300	82	500	18
1971	4,000*	3,300*	83	700*	17

* Extrapolation of first-quarter volume.

These annual figures are a bit deceiving as they do not show the considerable fluctuations in issue volumes from quarter to quarter, or even month to month. These fluctuations are grounds for the often cited "instability" of the market.

How serious a problem is this really? It is undeniably true that the market lacks the degree of institutional buying strength which supports the U.S. and U.K. bond markets, although there are some institutional investors such as insurance companies with policies outstanding in third countries, some specialized offshore mutual funds, and a few international agencies with extraterritorial status in respect to taxes and exchange controls.[8]

However, the most important group of investors consists of wealthy individuals who keep their substantial savings in countries other than their own to protect themselves from political, currency, and fiscal risks. More often than not their portfolio decisions are made by professional advisers, including bankers. Approximately one-third to one-half of the funds invested come through Switzerland. Another contingent of investors includes those lucky enough to live in countries without significant exchange controls. Unfortunately, the number of these countries is small, and it appears to be dwindling.

These individual investors are extremely sensitive to any kind of uncertainty. Due to the lack of homogeneity of issuers, preferences for

[8] Stanislas M. Yassukovich, "The Development of the International Capital Market," *Euromoney* (January 1971): 18.

issues go largely by the "name," that is, the familiarity of the issuer and some intuitive feeling about his determination and willingness to repay his obligations.

The flexibility of the market allows it to handle some kinds of uncertainty very well. For example, during the spring and summer of 1970, traditional instruments, such as straight bonds and convertibles, could not be marketed. Yet, a considerable amount of funds was raised through the new instrument of the variable-rate bond. This formula provides for a resetting of the coupon every six months at a specified margin (approximately 1 percent) above the Eurodollar interbank rate. Five such issues appeared in 1970.

Currency uncertainty can also be handled. Eurobonds can, at least theoretically, be issued in any currency, currency combination, or even artificial currency construct that is mutually acceptable to investors and issuers. Looking over annual data, one can see that the use of the U.S. dollar has been fairly stable — two-thirds to three-fourths of all issues have been denominated in dollars — although there are considerable fluctuations over shorter time spans. As in past years, the German mark-denominated issues were in favor whenever uncertainty clouded the dollar. The Unit of Account — whose value is based on seventeen currencies — continued to be used on a small scale.

A significant new development was the use of the European Monetary Unit, which is based on the value of the five Common Market currencies. Although the first few issues were made by Common Market agencies, partially to promote and put into action the ideas of the Werner Plan,[9] other issues followed and were sold at very reasonable yields. One cannot, however, be too optimistic about the future of this formula as it throws the risk of a revaluation of any one of the currencies squarely on the issuer. This is because the bondholder can specify in which currency he wishes to have interest and principal paid to him.

The use of Eurobonds, which are convertible into the common stock of the parent company, fluctuates, of course, with the prospects on Wall Street and the Tokyo Stock Exchange. These prospects were not too exciting during 1969 and 1970; accordingly, the market ceased to accept those instruments. However, what has been called the demise of the Eurobond market by some observers has shown itself to be

[9] The Werner Plan, published in late 1970, proposed detailed steps toward a common currency in the European Economic Community.

nothing but a brief pause. Indeed, already in the first quarter of 1971, some big issues have come to the market.

Looking briefly at borrowers, it is obvious that the composition of borrowers has remained very stable. Eighty percent of the funds raised go to private corporations, and the rest goes to public bodies from developed countries. U.S.-controlled international corporations account for approximately 30 to 40 percent of all issues. (See table 3).

This leads to the observation that the hope that these international money and capital markets will turn into sources of funds to solve the problems of underdevelopment will, unfortunately, remain a pipe-dream. Underdeveloped countries just do not meet the expectations of investors in this market regarding acceptable risks. This, of course, is only true for direct borrowing. There is a plentiful supply of funds for development purposes if the investments are carried out by prestigious multinational corporations or international development agencies.

Another hope which has not been fulfilled and is unlikely to come true is for the development of a Euroequity market. The detailed reasons are fairly complex, but they are based on some fundamental differences between debt and equity instruments, and also on some important differences in taxation.

LONG-TERM OUTLOOK

Finally, a brief comment is in order on the recurring debate regarding a "control" over these markets. There are many reasons for such demands. For one, the fierce competition in these markets is not welcomed by many bankers, especially those who usually operate in national markets protected by cozy anticompetitive arrangements.

Table 3. Corporate Eurobonds: U.S. vs. Non-U.S. Corporations (In million-dollar equivalents)

Year	Corporate Eurobond Total	U.S. Corporations Total	U.S. Corporations Percent	Non–U.S. Corporations Total	Non–U.S. Corporations Percent
1968	2,800	1,900	68	900	32
1969	2,200	900	41	1,300	59
1970	2,300	800	35	1,500	65
1971	3,300*	1,200*	36	2,100*	64

* Extrapolation of first-quarter volume.

Undoubtedly, from time to time competitive excesses may have occurred, but, for the system as a whole, they are not serious. It should be noted that the markets have survived the absence of direct regulatory supervision very nicely; the few "failures" were almost all connected with institutions which had similar loans or similar security issues outstanding in the sophisticated, well-supervised, and regulated U.S. market.

The real problem may come from another quarter. The markets may become victims of their own success. They have become so efficient, particularly the Eurocurrency markets, that short-term money flows take on dimensions which apparently cannot be handled by the monetary authorities of some countries. The international monetary crisis of May 1971 is a prime illustration.

There are reasons to fear that, instead of more international cooperation, new kinds of controls in national markets may emerge. This is essentially the only method by which a country can resist unwanted external capital flows if its monetary policy differs from that of other major countries. Alternative measures would require a degree of cooperation among central banks, that is, *all* central banks, to make them effective. This is unlikely to occur, simply because these institutions would have to sacrifice national objectives. Such actions are contrary to their basic charters and doctrines.

SOME IMPLICATIONS FOR ACCOUNTING

With all these different possibilities for corporate borrowing, traditional methods of disclosure may have become inadequate. This is clearly illustrated by the following example. With some knowledge of past interest rates, a skilled analyst has formerly been able to assess the explicit cost of the short-term and long-term debt of a corporation. This becomes virtually impossible once balance-sheet positions such as "notes and loans payable" and "long-term debt" lose their homogeneity. Obviously, a five-year floating-rate Eurocurrency "revolver" or a fifteen-year 7 percent Dutch guilder debenture have totally different effects on the future profitability of the corporation than a 6 percent domestic bank loan or an 8 percent dollar issue of long-term debt. This points to a clear need for supplementary statements, yet too few corporations have taken the steps which adequately reflect the new opportunities international capital money markets offer.

Table 4. Eurobonds: Aggregate Value in Currency of Issue (In million-dollar equivalent)

Year	Eurobonds	$US[1]		DM[2]		DFl[3]		EUA[4]		£/DM[5]		FFr[6]	
	Total	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent
1968	3,200	2,425	76	675	20	. .		50	2	25	1	25	1
1969	2,800	1,650	58	1,050	38	50	2	50	2	. .		. .	
1970	2,800	1,800	68	550	16	400	14	50	2	. .		. .	
1971	4,000*	2,925*	73	600*	15	450*	11	25*	1	. .		. .	

* Extrapolation of first-quarter value.
[1] U.S. dollars.
[2] Deutsche marks.
[3] Dutch guilders.
[4] European Units of Account.
[5] Pound sterling; Deutsche marks.
[6] French francs.

*Harmonized European Economic Community Accounting—A German View of the Draft Directive for Uniform Accounting Rules**

RUDOLPH NIEHUS**

INTRODUCTION

Creating a truly Common Market requires commonly accepted accounting rules and conventions. The importance of this axiom was realized by the signatories of the Treaty of Rome, which, on March 25, 1957, initiated the age of European harmonization. Anybody who looks for a relevant provision, however, will be surprised to find it buried in the "Freedom of Movement" section of the treaty. Article 54, subsection 3, paragraph (g) is the *sedis materiae.* It rules that

> the Council and the Commission fulfill the tasks conferred upon them by the above provision, in that they in particular shall coordinate, to the extent necessary, the protective measures that have been issued by the member states in the interest of shareholders for the companies in the meaning of article 58, section 2, as well as of third parties in order to make these measures of equal value (*gleichwertig*).

* This article is based on the German version of the draft of the fourth directive as *Bundestagsdrucksache* (German Parliamentary Reporter) and deals with the provisions relating to stock corporations (public companies) only. It does not cover the few rules that deal with private companies. As no English version was as yet available, all translations are the author's.

** Mr. Rudolph J. Niehus is a partner of the firm Deloitte, Plender, Haskins & Sells, Dusseldorf, West Germany. He was a member of the first subcommittee of the German Institute on "generally accepted principles of auditing" and of the Tax Committee of the American Chamber of Commerce in Germany. Mr. Niehus has contributed both to German and other national accounting publications.

As long as European states retain their individual sovereignty, attempts at harmonization can only take the form of "directives," which the European Commission drafts and which, after debate by the European Parliament and approval by the European Council of Ministers, are incorporated into the national laws of the member states.

In the area of harmonized accounting, four directives have been released to date, one of which has become EEC law.[1] Published on March 9, 1968,[2] it requires the disclosure on company stationery of the capital stock, the location of the company, and the names of its managers.

On March 9, 1970, the committee published the draft of a second directive,[3] which regulates the formation of a corporation and further deals with the disclosure and preservation of its equity structure. As the directive's title indicates, the concern is clearly aimed at protecting creditors. This draft was followed on June 16, 1970, by another designed to grant minority shareholders greater protection in case of mergers. This "third draft," as it is usually called, is entitled "National Mergers of Stock Corporations."

The last draft, usually referred to in European accounting circles as the "fourth directive," was completed some time ago. Its German version was released as *Bundestagsdrucksache,*[4] and deals with the annual accounting of corporations (*Aktiengesellschaften*) and private limited liability companies (*Gesellschaften mit beschränkter Haftung*).

This fourth draft directive is the most voluminous and the most far-reaching. It attempts to lay the groundwork for "harmonized" European financial statements — uniform disclosure, uniform valuation, and uniform reporting rules for all companies operating in the European Market area.

The preamble to this new draft explains its objectives in some detail. They might be summarized as follows:

(1) to protect shareholders, creditors, and the public in general;

(2) to permit as accurate an insight as possible into the capital structure, the liquidity, and the profitability of the reporting entity;

(3) to arrive at common accounting practices; and

(4) to issue accounting rules and regulations that, in principle, are compulsory.

---

[1] March 9, 1968.

[2] *Amtsblatt der Hohen Behorde,* no. L 65, March 14, 1968.

[3] *Amtsblatt der Hohen Behorde,* no. C 48, April 24, 1970.

[4] *Bundestagsdrucksache* (German Parliamentary Reporter), VI:2875, December 7, 1971.

A GENERAL VIEW

The draft of the fourth directive was completed over a period of nearly five years by representatives of the public accounting bodies of the member countries. From his experience on the project, Elmendorff, the project chairman, reports that "it was relatively simple to agree on generally accepted valuation rules, but to reach a consensus on the disclosure rules proved to be not too easy."[5]

In the following, we will attempt first to summarize some salient features of the new EEC valuation requirements and then to explain in general the format of the financial statements and the disclosure and reporting rules from a German perspective. A German vantage point is justified not only because Germany was the first member of the present six after World War II to introduce a modern law prescribing model statements (France, the other one, did a year later in 1966), but also because the whole law is quite noticeably permeated by concepts that seem to have been borrowed from the German stock corporation law.

BASIC CONCEPTS AND POSTULATES

Naturally, all companies in the Common Market area will have to adhere to the new rules once the directive has been ratified by the various national legislatures. The committee realized that, while all of the rules must be strictly observed, they nevertheless can do no more than provide the mere framework for uniform EEC accounting.[6] The committee explains that the draft starts from a series of principles and basic concepts that it has tried to define to be as all-inclusive as possible. On the other hand, the futility of regulating in one step each and every case of decades, if not centuries, of accounting practices in six different countries was realized. The flavor of a compromise pervades the whole directive.

When a departure from the basic rules and regulations is permissible, it is clearly stated in the law that such a deviation must be disclosed adequately so that each reader can form his own opinion on the extent of such a deviation, its impact on the financial statements, and the results for the period.

[5] Dr. W. Elmendorff, "Harmonisierung der einzelstaatlichen Rechnungslegungsvorschriften in der europaischen Wirtschaftsgemeinschaft," *Journal UEC,* No. 4 (1967): 217 et seq.

[6] See notes, pp. 16–17 (in the following referred to as "Motives").

Seven postulates on which harmonized EEC accounting will be based may be gleaned from the new directive:

1. The annual financial statements shall consist of a balance sheet, a statement of income, and an "annex."[7]

The three are indivisible. This is of particular importance for publication. It means also that the annex must be made public together with the two conventional financial statements.

As will be seen later, the annex seems to be a cross between the usual German Business Report[8] and the "Notes to Financial Statements" usually found in Anglo-American statements. Its importance comes from being the result of a compromise. The balance sheet and the income statement must be explained in the annex "to the extent necessary to convey an insight as accurately as possible into the equity, financial and profit position of the company."[9] This would be the standard role of the annex, but the draft directive further decrees that in every case where it permits an alternative method or a method that might be considered as not universally accepted, this variation must be "explained," "justified," in the annex.

These short statements may be adequate to show that under compromise accounting rules, the statutory disclosure in the annex becomes an indispensable tool of fair presentation.

2. The annual financial statements shall be prepared "in accordance with generally accepted accounting principles."[10]

Judging from the existing situation in Germany, this is a rather bold statement as it is still not universally agreed what "generally accepted accounting principles" means. Presumably, the same applies generally for the EEC countries. The existing vacuum will need to be filled by Common Market authorities. The committee was aware of how ambiguous and therefore how difficult the situation is in this context. The responsibility for filling this vacuum was left to the representatives of the accounting professions of the member states.[11] How this vacuum will be filled one can only speculate. For any Anglo-American reader of the fourth directive, conspicuously absent are such

[7] *Proposal for a Council Regulation Embodying a Statute for European Companies* (Brussels, Belgium: June 24, 1970) (in the following referred to as "Statute"), art. 2, ss. 1. All references refer to the article numbers of the German version.

[8] German Stock Corporation Law, sec. 160.

[9] Statute, art. 40.

[10] Statute, art. 2.

[11] Ibid.

words as "true and fair view" or "represent fairly." Thus it is conceivable that after the entry of Great Britain into the EEC a further compromise will be achieved, one observing, on the one hand, the mandatory, broadly phrased accounting rules (thus accommodating the more legalistic concepts of the Romanic countries), but blending with this framework, on the other hand, the specific principles developed from the doctrine of a "true and fair view" and "fair presentation" that provides over-all guidance to Anglo-American accounting practices.

3. The annual financial statements shall be prepared "as clearly and concisely as possible. They shall, within the framework of the valuation and disclosure rules, permit an insight as informative as possible into the capital structure, the financial position, and the profitability of the company."[12]

The same concept is found in German corporate law. It has been decreed that the annual financial statements shall be "prepared in a clear and informative manner and must, subject to the rules concerning valuation, permit as accurate as possible a picture of the financial and earnings position of the company."[13]

4. Furthermore, the rules decree that national legislation shall incorporate the principles of "formal consistency, individual valuation, conservative valuation" (i.e. unearned profits may not be taken into income, "a principle of good business practice" as the motives call it,[14] and finally, the principle to set up "valuation reserves" regardless of whether the year ends with a profit or a loss.[15]
5. All statements shall be prepared on a consistent basis.[16]
6. Prior year's figures must be shown for each item on the Balance Sheet and the Income Statement.[17]
7. Lastly, in harmony with the compromise spirit of the Directive, "exceptions from these rules shall be permissible in unusual circumstances only, but must be adequately disclosed in the annex."[18]

VALUATION METHODS

Historical Versus Replacement Cost

In principle, valuation is to be on a historical cost basis. However, fixed assets (except land and inventories) may be stated at replacement

[12] Motives, p. 17.
[13] Ibid.
[14] Motives, p. 23.
[15] Statute, art. 28.
[16] Statute, art. 3.
[17] Statute, art. 4.
[18] Statute, art. 3.

values, provided this is permitted by national law.[19] This is a radical departure — viewed from the German point of view — from an iron-clad rule that all valuation must be at cost[20] or, under certain conditions, at lower market. Perhaps, however, this is not too radical a departure; for instance, some of the larger Dutch companies have presented their annual financial statements using partly replacement values.[21]

The text does not cite the Dutch practice but this nevertheless explains why this alternative valuation was introduced into EEC accounting: "In order to account for the practice in one member country and to present the development and adjustment of the valuation rules in the sense of taking into consideration fluctuations in the value of money . . . , a deviation from the rules of articles 32 to 39 was provided for."[22]

If under EEC accounting valuation is made at higher replacement values, the method of valuation must be explained and "justified" in the annex.[23] Nothing, however, is contained in the new rules stating how to make such a revaluation. What specific indices should be used? How many years must elapse between each revaluation date? How should the greater technical efficiency of the equipment hypothetically considered as replaced be accounted for?

All that the companies are required to explain in the annex is the use of the replacement method, and, of course, the basis on which replacement values were calculated. All this clearly leaves an enormous vacuum to be filled by the Common Market accounting profession; it will probably keep the profession occupied for years to come. Any surplus from revaluation must be shown in a revaluation reserve account, a separate item on the liability side. Depreciation, of course, must be charged on the increased values.[24]

The same rules basically apply to inventories if they have increased in value and are raised accordingly. The revaluation increase on both fixed assets and inventories also is transferred to a separate valuation reserve.

The surplus may be converted into capital stock at any time, but, in principle, it cannot be used for dividends.[25] The related assets may have

[19] Statute, art. 30.
[20] German Stock Corporation Law, secs. 153, 155.
[21] Cf. J. Kraayenhof, "International Challenges for Accounting." *The Journal of Accountancy* (January 1960):34 et seq.
[22] Motives, p. 24.
[23] Statute, art. 31, ss. 1, para. 2.
[24] Statute, art. 30, ss. 6.
[25] Statute, art. 30, ss. 4 and 5.

been retired. In this case, the revaluation reserves are no longer needed. They then must be closed to income, but this must be disclosed in the income statement.[26] Except for the cases just mentioned, the revaluation reserve may not be liquidated.[27] Of course, this offers the companies certain possibilities of manipulating their profits to some extent in that they may, for instance, postpone the physical disposal of an asset to a year when they most need the related revaluation surplus.

Revaluation

Apparently, the council believed from the start that it should provide inflation accounting procedures. It permits the member states to issue rules for the periodic revaluation of fixed assets and investments. Once these assets have been revalued, depreciation must be based on these higher values.

The rules for disclosing any revaluation surpluses in the balance sheet and the income statement are identical with those for replacement accounting explained above.

Deferral of Organization and Expansion Expenses

Expenses incurred for the organization and expansion of a company may be deferred, provided that this is permitted by national law, but they must be amortized over a period of not more than five years.[28] German law restricts such a deferral to organization costs.[29] EEC law is far more generous. It not only permits the costs for beginning the operations (organization expenses in a narrower sense) to be deferred, but also all organizing and expansion expenses. Equally important, there is no time limit on such a deferral. Compulsory amortization need not be made, provided it is explained in the annex.[30] Nothing more is said of how this "exception" shall work. As long as such an item has not been fully amortized, however, dividends cannot be distributed unless an equivalent amount has been included in the reserve account.[31]

From personal experience, one is tempted to add that it may be extremely difficult in practice to define and segregate "expansion expenses" from regular overhead items. Perhaps for this reason most businesses — at least in Germany — do not normally follow this prac-

[26] Statute, art. 30, ss. 4.
[27] Statute, art. 30, ss. 5.
[28] Statute, art. 32, para. 1(a).
[29] German Stock Corporation Law, sec. 153.
[30] Statute, art. 32, para. 2.
[31] Statute, art. 32, para. 1(a).

tice. Moreover, implementation of this section has frequently led to controversies between the public accountant and his client.

Deferral of Research and Development Expenses

A deferral of research and development expenses will not be permitted in Germany even after the EEC accounting rules, as these rules are now drafted, are legally accepted. The draft directive permits deferment of these expenses to future periods only if sanctioned by national law. The tangible value of research and development expenses is considered so vague that, under the German concept, it would be contrary to the principle of prudence to defer them.[32] Naturally, if research and development expenses have materialized to such a degree that production has already begun or is about to begin, the question may be what proportion of these expenses can be considered as a part of production costs and can be treated accordingly. A different approach may be possible in the case of "cost-plus" contracts that include research and development.

Fixed Assets

One would have expected the rule to be clearly prescribed for fixed assets that are to be depreciated over their useful lives. This, however, is not the case. Instead, it has been decreed that depreciation must be made "according to plan."[33] "Scheduled depreciation" shows a German orientation; section 154 of the Stock Corporation Law contains the rule that fixed assets "have to be diminished by depreciation according to plan."[34]

A special write-down must be charged to the fixed assets if the decline in value seems permanent. The originally higher value must be reinstated once the reason for the special write-down no longer exists.[35] The first part of the rule is self-explanatory. The second part under the German accounting convention, however, clearly is a generally welcome departure from a somewhat over-conservative accounting concept still evident in the German corporation law.[36] In Germany a company is permitted to retain the lower book value even after market value again equals or exceeds original cost.

---

[32] Adler-Düring-Schmaltz, *Rechnungslegung und Prüfung der Aktiengesellschaft,* 3rd edition (Stuttgart: 1968), p. 485.
[33] Statute, art. 33, ss. 1(b).
[34] German Stock Corporation Law, sec. 154, ss. 1.
[35] Statute, art. 33, ss. 1(c)(dd).
[36] German Stock Corporation Law, sec. 154, ss. 2, last sentence.

Definition of Cost

"Cost" for EEC accounting, as elsewhere,[37] denotes the purchase price plus incidental expenses, and, as elsewhere in the accounting world, the EEC rules make no distinction between the cost of fixed assets and inventories. Manufacturing costs include the cost of raw materials plus direct production costs to the extent that they relate to the period of manufacture. In any event, selling expenses must be excluded.[38]

Fixed Value Items

A useful provision regarding the determination and documentation of certain types of "cost" is contained in section 35. To the extent that fixed assets and raw materials or supplies are replaced regularly, and in general are immaterial in terms of their relative value, they may be stated at a "fixed value." This permits replacements to be expensed immediately; in practice one particularly attempts to avoid the costly and organizational problems of determining quantities and inventorying them annually.

While the directive admits that this rule introduces a practice already generally accepted in many countries,[39] it does not specify the number of years later that the underlying items have to be counted physically again and the "fixed value" adjusted accordingly to reflect the more recent values.

Clearly this is an important aspect because the undervaluation maintained for years could otherwise become substantial, at least in those countries where, unlike Germany, no national rules demand a physical inventory with consequent adjustment every three years, and, of course, assuming an inflationary tendency as has existed in the past.[40]

Inventories at LIFO or FIFO

The new EEC accounting rules permit inventories to be stated at LIFO or FIFO instead of at historical costs, thus codifying a convention that seems to have become a permanent feature of Anglo-American accounting and, at least since 1965, when the new Stock Corporation Law went into effect, is also permissible in Germany.[41] By accepting the

---

[37] Statute, art. 33, ss. 1(a); art. 36, ss. 1(a); German Stock Corporation Law, sec. 153, ss. 2.
[38] Statute, art. 33, ss. 3(c); art. 36.
[39] Motives, p. 26, right col.
[40] *Handelsgesetzbuch* (German Commercial Law), art. 40.
[41] Adler-Düring-Schmaltz, op. cit., p. 501.

LIFO principle, one tacitly has accepted an undervaluation of inventories — again assuming a continuing rise in prices.

Interest on Self-Constructed Assets and In-Process Products

EEC accounting rules will condone capitalization of interest on long-term loans as part of construction cost only if it is permitted by national law. In Germany, it has generally been held that this is permissible,[42] although there still seems to be no uniformity of opinion. The new directive obviously also considers this a somewhat unusual item, specifying that it be explained in the annex.[43]

While this treatment of interest on loan capital may be acceptable to most accountants, the directive does not stop here. If national law permits the inclusion of interest as part of the cost of fixed assets or of in-process or finished goods, this will also be generally accepted under EEC accounting. One can easily see where this compromise can lead. In loss years, certain EEC companies will be permitted to "capitalize" their dividends. Depending on where they are domiciled, they will seem richer than others, and the public will be deceived. It will tend to invest in these companies, even if the unusual practice is "justified" in the annex.

One would have expected to find a provision proscribing at least the distribution of the profit resulting from this practice as a dividend, but this is not the case. Many accountants believe that the council, in its laudable endeavors to accommodate every accounting faction in the Common Market, simply went too far with this provision.

Investments

A solution worthy of Solomon was reached for investments. The problem is whether dividends on investments should be shown in the parent company's statement when earned by the subsidiary or whether such income can be taken into income only if dividends have been received. The latter is the case, for instance, under present German accounting conventions, whereas in England and the United States income from investments under certain conditions must be recorded although no dividends have as yet been distributed.[44] We do not know

---

[42] Adler-Düring-Schmaltz, op. cit., p. 649.

[43] Statute, art. 33, ss. 4(a).

[44] Accounting Principles Board, *APB Opinion Number 18: The Equity Method of Accounting for Investments in Common Stocks* (New York: American Institute of Certified Public Accountants); and *Statement of Standard Accounting Practice: Accounting for the Results of Associated Companies* (London: Institute of Chartered Accountants, in England and Wales).

if the commission could not agree on which principle to decree; at any rate, the directive is based on the concept that investments be shown at cost, but it also permits them to be shown "at valuation."

Liabilities

Liabilities must be shown at the amount owed the creditor. As under German law,[45] if the money received from the creditor is less than the ultimate debt, the difference may be shown separately on the asset side, but it must be amortized at the latest when the loan is repaid.[46] This means — at least the wording permits such an interpretation — that no amortization "pro rata temporis," as would be considered proper under German accounting, is required.

Accruals

Restraint certainly was exercised as far as the use of accruals is concerned. The aim was "to have a rigid and exact definition of accruals in order to prevent any unwarranted distortion of this item and the possibility of hidden reserves resulting therefrom."[47] Therefore, it was decreed that an accrual may be recorded only for those expenses that the company expects to incur "with certainty." Losses or expenses covered by accruals must be definable according to their types.[48] In other words, they are distinct from accruals that relate to an entrepreneur's general risks, for which no provision can be made. Regardless of this restriction all accruals of "some materiality (*eine gewisse Bedeutung*) must be explained in the annex.[49]

Valuation Reserves

These must not be confused with accruals. "Valuation reserves" are adjustments to values (the literal translation is "value corrections") appearing on the asset side while the former relate to "expenses expected to be incurred with certainty in the future."

The commission realized that "the terms used in the various member countries for 'correction' of assets may at first appear to be identical, but in reality have entirely different meanings."[50] Therefore, it was deemed prudent not even to attempt to arrive at uniform terms. In-

[45] German Stock Corporation Law, sec. 156, ss. 3.
[46] Statute, art. 38, para. 1.
[47] Motives, p. 21, right col.
[48] Statute, art. 17.
[49] Statute, art. 39, para. 2.
[50] Motives, p. 21, left col.

stead, it used, as the committee called it, "its own common terminology."[51]

Results from Operations

The draft directive has not attempted to devise any uniform rules regarding the disclosure of the "financial results" (as the draft directive paraphrases the "net income (or loss) for year") and in particular their disposition. It is absolutely required, however, that the disposal of the "profits"[52] (meaning how much dividend was distributed or how the loss was disposed) must be clearly set forth in the financial statements or in the annex. The commission obviously realized that there are too many different laws and concepts to devise any uniform rules here.

EEC FINANCIAL STATEMENTS

As Elmendorff reported,[53] it proved to be quite difficult to reach an agreement on the format of the balance sheet and the statement of income. The obvious solution to such a multinational dilemma — a compromise — is clearly shown by the great flexibility that is possible in preparing the EEC financial statements.

The balance sheet and the statement of income may be published in either the "account" or the "statement" form. Furthermore, the companies may elect to prepare the income statement by, as we describe it, the "continental" method, showing all expense items by types of disbursement, or the Anglo-Saxon method, showing expenses by functions or by operational centers. The only rule that must be observed in all cases is consistency.[54] All changes in format must be discussed in the annex and disclosed adequately.

The ECC model statements apply the so-called "gross value" rule: any offsetting of assets and liabilities and incomes and expenses is not permitted in principle.[55] This again is clear to anybody basically familiar with the concepts of German corporation accounting.[56] "Value corrections," consequently, must be shown on the liability side or, alternatively, they must be deducted on a separate line from the orig-

[51] Ibid.
[52] Statute, art. 5.
[53] See footnote 5.
[54] Statute, art. 3.
[55] Statute, art. 6.
[56] Not specifically mentioned in the Stock Corporation Law (except for receivables and payables), but generally considered part of generally accepted accounting principles; cf. Adler-During-Schmaltz, op. cit., p. 22.

inal cost of the respective assets. The draft directive does not mention this, but the purpose of adequate disclosure is not obstructed if, as a third possibility, the "value corrections" are shown parenthetically. This latter practice is closer to the Anglo-Saxon practice. In Germany, a middle road is considered preferable: current assets usually are shown net of "value corrections."

To accommodate every national concept of statement presentation, the EEC balance sheet and the EEC statement of income apparently had to contain a broad range of headings — so broad in fact that it may be difficult to implement them. It is permissible to show the sections preceded by a roman numeral provided that such a condensation is still in accordance with the basic rule that "an insight as clearly as possible must be given into the financial position of the company,"[57] and, most importantly, provided that the law of the particular country where the company is domiciled does in fact permit such a condensation. Here, the companies in Europe may well be "between the hammer and the anvil": national law may permit a condensation, but EEC law may consider such a condensation to be significant.

THE MODEL BALANCE SHEET*

Sequence of Accounts — Degree of Liquidity

The format of the balance sheet is based on the theory that the sequence of items on both the asset and liability side shall reflect a decreasing degree of liquidity, i.e., the time normally required to convert the item into cash.[58] Therefore, the balance sheet begins with those items that usually are most difficult to convert, namely, fixed assets followed by investments and current assets ending with cash. The same applies to the liability side. Here the first caption is capital stock, then reserves, followed by accruals, etc.

This ordering of items again seems to conform generally with German practice, but seems to differ totally from Anglo-Saxon practice. The desire to present a degree of information about the company's liquidity and capital structure is also evident in the requirement that the residue amount due within one year from accounts receivable must be shown parenthetically.[59]

The purpose of this resume cannot be to theorize on the possibility —

[57] Statute, art. 2, ss. 3.

* See Exhibits A and B, pp. 116–21.

[58] Motives, p. 19, left col.

[59] Statute, arts. 8 and 9.

or fallacy — of judging the liquidity position of a company from its balance sheet, in particular if the company has been in operation for at least several months. It is adequate to mention here that the same criticism can be raised against the German Stock Corporation Law, which contains a similar rule.[60]

If an item seems to fall under more than one caption, this must be clearly disclosed on the face of the balance sheet.[61] In practice, this means that the other caption to which it also belongs must be mentioned parenthetically.

Investments

The definition of investments begins from a very subjective basis. It is left to the individual company to determine whether its investment in another company really is an "investment" in the meaning of EEC accounting terms. The criterion is whether the company intends to exercise the ownership rights that it may have in another enterprise. If the answer is affirmative, it is an investment.[62] Otherwise, it is treated as marketable securities invested on a long-term basis.

"De minimis non curat praetor" — an ownership of less than 10 percent in the capital stock of another company can never be considered as an investment. This concept in any event is narrower than that hitherto accepted in Germany, where normally the minimum voting stock required for an account to qualify as an investment was 25 percent.[63] That rule no doubt was influenced by German law, which normally gives a 25 percent vote certain powers, sometimes even the power to block resolutions at a stockholders' meeting.

Fixed Assets

Contrary to Anglo-Saxon accounting conventions, the fixed asset section on an EEC balance sheet, for the reasons just mentioned, begins with intangibles, followed by tangibles, and then, as separate items, investments and other long-term financial accounts.

As to the presentation of the fixed assets section, the new directive permits only the "original cost method."[64] Fixed assets must be shown at original cost plus additions less retirements, separate from a similarly subdivided accumulated depreciation section. Such a presentation in

[60] German Stock Corporation Law, sec. 151.
[61] Statute, art. 10, ss. 1.
[62] Statute, art. 14.
[63] German Stock Corporation Law, sec. 152, ss. 2.
[64] Statute, art. 12, ss. 2, para. 3(a).

columnar form may be made on the balance sheet, as is the dominant German practice,[65] or, alternatively, in the annex.

If a change to the "original cost method" of presenting fixed assets would cause an undue amount of time and money for a company, it will be permissible to consider the net balance at the beginning of the changeover year as original cost and to accumulate depreciation in a reserve account from that year forward.[66] This should prove a helpful provision because, in practice, a change, such as when a recently acquired German company must adapt its accounting to the Anglo-Saxon method, frequently has proved impossible. This is particularly true when no subsidiary plant records have been maintained.

Land must be reported together with the value of buildings erected thereon. This is different, for instance, from the American practice, where the value of unimproved land is deducted from the cost of the pertinent buildings and shown in a separate account.[67]

To the extent that national laws permit, the capitalization of leasehold improvements must be included in land and building accounts and apparently cannot be shown separately.[68] This, in our opinion, is a weakness because it is evident that leasehold improvements do not have the same value to a reader of a balance sheet as the other fixed assets owned outright by the company. We believe that this distinction should be made clear to the reader.

Treasury Shares

The nominal amount of treasury shares has to be stated parenthetically and, most importantly, they must be carried on the asset side, but only if permitted by national law.[69] In other words, under no condition may they be deducted from capital stock. This varies from the German practice, where the purchase of treasury shares generally is limited to 10 percent.[70] EEC law seems to permit a company to purchase its own shares without any limitation, except for the provision that a purchase may be made only if there is a reserve in an equal amount on the liability side. In other words, equity must be accumu-

---

[65] German Stock Corporation Law, sec. 152, ss. 1.

[66] Statute, art. 12, ss. 2, para. 3(f).

[67] Finney and Miller, *Principles of Accounting,* 5th ed. (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1958), p. 330.

[68] Statute, art. 13, para. 1.

[69] Statute, art. 10, para. 2.

[70] German Stock Corporation Law, sec. 71, ss. 1 in connection with sec. 160, ss. 3, no. 2.

lated at least in an equal amount if a company purchased its own shares. It remains to be seen if this provision will not prove to be at least as effective as the numerical limitation prevailing under German law.

Results for Year

The profit for the year must be reported in the balance sheet in a separate section on the liability side (and the loss on the asset side) and not, as has long been customary in the more logical Anglo-Saxon practice, as a separate (positive or negative) item in the equity section. On principle, it must be reported separate from the profit (or loss) brought forward.[71]

Deferred Charges and Credits

The directive uses the classical definition of deferred charges and credits:[72] disbursements made prior to the balance sheet date but relating to a definite period after that date, and income earned prior to the balance sheet date but received after the year-end.

This means that advertising expenses, for example, can no longer be deferred and amortized subsequently if they do not relate to a definite period after the balance sheet date. This, of course, normally is not the case in practice. Advertisements in periodicals appearing after the balance sheet date are perhaps exceptions. The classical example is the summer timetable of the German Federal Railroad, which appears in May but for which advertisements must be received the prior fall.

This section is also not free of compromise. Income earned prior to a balance sheet date, but received subsequent to it, need not be shown as a deferred item but may be classified as a receivable. Instead of such an alternative, the German Stock Corporation Law contains a strict "must."[73]

The same rules, both as to origin within a definite time and disclosure as a liability (expenses incurred for a definite period prior to the balance sheet date must be paid later), apply to deferred credits.

Liabilities

The liability side of the balance sheet begins, as is the practice in Germany, with capital stock[74] followed by reserves. EEC accounting

---

[71] Statute, arts. 8 and 9.
[72] Ibid.
[73] German Stock Corporation Law, sec. 152, ss. 9.
[74] Arts. 8 and 9.

provided for a multitude of reserves, apparently to accommodate the differing national laws: legal reserve, premium reserve, valuation reserve, reserve for own shares, reserve required by the by-laws, and free reserves.

It would have been very helpful if the directive had stipulated how the various reserves were to be used. Naturally, the absence of more definite provisions demonstrates the compromise between the various national accounting conventions. One is again reminded of the necessity as stressed in the draft for the European accounting profession in particular to fill the vacuum that still exists.[75]

Accruals

The accrual section shows what, from a German point of view, one is tempted to call the "classical" subdivisions: "Accruals for pensions and similar obligations, tax accruals including deferred tax accruals, other accruals."[76]

It also suggests the consideration that has been given to the timing effects in relation to accounting for income taxes. The section also presupposes a universal agreement on the nature of accruals and reserves. As one knows, this condition is still in the distant future, at least in the EEC area.

Accounts Payable

Compared to the customary Anglo-Saxon balance sheet, the accounts payable section shows an almost excessive number of subheadings, eight. Despite this plethora, no breakdown has been provided for long- and short-term loans. Apparently, again as a result of a compromise, it has been decreed instead that the portion that must be repaid after five years must be disclosed. Under German Stock Corporation Law, the criterion is four years.[77] This period in the German model balance sheet reflects the German banking world's view that loans over four years are long-term. May it be assumed that the five-years concept is somehow related to EEC banking usage?

---

[75] See footnote 6.

[76] Statute arts. 8 and 9; Motives, p. 19, right col.; see also German Stock Corporation Law, sec. 151.

[77] German Stock Corporation Law, sec. 151. This provision must be received as directly related to the long-term section on the assets side where in a separate section beneath fixed assets, advances, and loans over more than four years must be shown separately. This contrasection is conspicuously absent from the EEC balance sheet.

Contingent Liabilities

Any guarantees assumed for third parties must be reported in a footnote or in the annex. This information may be subdivided as to the various forms of guarantees required by national law with the collateral, if any, stated. Guarantees assumed for associated companies must be shown separately.[78]

THE MODEL STATEMENT OF INCOME**

General

For reasons of compromise stated above, EEC accounting offers a choice of four different income statements:[79]

The "account" form, with revenues and expenses classified as to:

(i) types of disbursement (Exhibit D), or
(ii) functional centers (Exhibit F).

The "statement" form, with revenues and expenses classified according to:

(iii) types of disbursement (Exhibit C), or by
(iv) functional centers (Exhibit E).

To epitomize this distinction by another difference in classification, the income statement (in account or tabular form) may show the "value of production,"[80] i.e., net sales plus any increase in inventories of in-process and finished goods (or less any decrease), or the "sales value" (with inventories at beginning and end of period and the cost of self-constructed fixed assets included in the cost of sales), which seems to be the most common, if not the only Anglo-Saxon method.[81]

Disclosure of Net Sales

Whatever format is chosen, whatever condensation or alternate classification is adopted ("a different classification may be adopted in exceptional cases, but must be mentioned and adequately explained in the annex," [82] a rule that applies to the balance sheet as well as to the statement of income), net sales must be shown separately. This disclosure is considered the "pillar of the income statement."[83]

---

[78] Statute, art. 11.
** See Exhibits C to F, pp. 122–25.
[79] Statute arts. 20 to 23.
[80] This method is prescribed by the German Stock Corporation Law, sec. 157.
[81] *Accounting Trends and Techniques 1970,* 24th ed. (New York: The American Institute of Certified Public Accountants, 1970), p. 164.
[82] Statute, art. 3.
[83] Motives, p. 23, left col.

"Net sales" means only sales of products typical of the purpose for which the enterprise has been founded.[84] In other words, sales from the company's cafeteria or scrap sales cannot be considered "typical." They would only inflate this item and, therefore, cannot be shown here. Fairness of presentation requires that they be disclosed as "nonoperating income."

Separate Disclosure of Financial Results and Nonoperating Results

Whatever format is chosen for the statement of income, a triple subdivision must be made. The results from operations must be shown separate from financial income and nonoperating income. Such an analysis, because it seems logical, generally would appear to be free from problems. Experience shows, however, that segregation of operating from nonoperating expenses can be extremely problematic. One only needs to consider expenses for employee housing, or for management activities in the civic sector; are they operating or nonoperating expenses? What of overhead costs, to mention another problem? Are they includable?

An analogous dilemma, in our opinion, does not exist concerning extraordinary income. This may usually be defined far more easily and with greater accuracy.

These brief comments may indicate why the 1965 German Stock Corporation Law, as distinct from the old act,[85] does not require extraordinary income to be shown separately (disclosure of extraordinary expense was always voluntary), but simply demands that the extraordinary portion of nonoperating income be shown parenthetically from other income.

THE ANNEX

The word "annex" seems to be novel in European accounting parlance. It is probably incorrect to assume that its function will be that of an explanatory section for the major items appearing in the balance sheet and the income statement, something that in Anglo-Saxon accounting usually is referred to as "notes" and in Germany is the function of the "business report," both being public accounting media.

In the business report of German stock corporations, "the methods of valuation and depreciation must be described as fully as necessary to permit as accurate as possible a picture of the financial and earnings

[84] Statute, art. 25.

[85] German Stock Corporation Law, sec. 157, ss. 1; see also Adler-Düring-Schmaltz, op. cit., p. 659.

position of the company,"[86] while the EEC directive demands that "the balance sheet and the statement of income shall be analyzed in the annex in such a way that as deeply an insight as possible into the capital structure, the financial position and the liquidity of the company is provided."[87] The commission, of course, realized that such a catchall phrase alone does not assure fair presentation. It decided to move in the direction of improving this sector of EEC, accordingly taking a multiple approach. It developed a catalog of data that must be disclosed in any event. In addition, it stipulated in the various sections where a deviation from the uniform disclosure or valuation rules is permissible with the condition that adequate disclosure is made in the annex. Of course, this is a compromise solution.

CANON OF MINIMUM DISCLOSURE

Clearly reminiscent of German provisions,[88] the directive enumerates data that must be disclosed in any event[89] (the German profession usually refers to them as "obligatory disclosure data") :

1. Valuation methods applied to the "various items appearing in the financial statements" (obviously the Commission meant the balance sheet), as well the method of calculation of the valuation.

One must inquire here if this means that all valuation reserves must be explained and that every item must have an accompanying comment. This certainly would result in a voluminous commentary. It is quite clear that one will need to invoke the "concept of materiality," to make the directive workable, although this is not expressly mentioned in this context. Furthermore, we think that the principles of translation adopted to state foreign currency debits and credits in national currency will need to be mentioned here.

2. Name and location of companies in which the reporting company owns 10 percent or more of the capital stock and use of authorized capital if this has been provided for.

The object of this clause is obviously to report all intercompany affiliations clearly. Therefore, the disclosure of investments is neither limited to situs in the Common Market area nor to "material" investments. If the ownership in the voting stock exceeds 10 percent, the name and all other pertinent details must be given.

[86] German Stock Corporation Law, sec. 160. ss. 2.
[87] Statute, art. 40.
[88] German Stock Corporation Law, sec. 160.
[89] Statute, art. 41.

3. Usufruct, convertible bonds, and similar negotiable instruments issued, together with an indication of the components and the rights granted by such instruments.

This is a replica of the German disclosure requirements.[90] It is interesting to note that the directive does not call for a calculation of "earnings per share" and consequently neither for one of earnings "fully diluted" — a calculation an EEC investor will still need to do for himself.

4. Total of financial contingencies to the extent that they do not appear on the balance sheet, provided that such information is of importance for an assessment of the company's financial position.

In other words, contingent liabilities must be disclosed in the annex and not, as is customary in Germany,[91] as a footnote to the financial statements. Financial obligations to associated companies not disclosed on the balance sheet, must be noted separately.

5. Total personnel expenditure if not disclosed separately in the statement of income.

This, of course, will be the case only if the statement of income is prepared by "functional centers." Certainly, only socioeconomic reasons could have provided the motivation for such a disclosure.

6. Taxes charged against profit from operations, financial profit, or extraordinary profit.

It is probably safe to assume that this diversified tax disclosure is necessary in view of the various tax laws in the member countries.

7. The amount of charges, and their effect on the financial position, resulting from the application of tax laws.

Again, this is necessary to account, as best as possible, for the various tax accounting methods of the various countries.

8. Total compensation paid to members of the board, of the management team, or similar groups.

This disclosure is standard under both Anglo-Saxon and German accounting rules.[92]

9. Total of loans and similar advances made to members of management, of the supervisory board, or similar groups, including guarantees assumed.

EEC accounting does not go as far as the German Stock Corpora-

---

[90] German Stock Corporation Law, sec. 160.
[91] German Stock Corporation Law, sec. 151, ss. 5.
[92] German Stock Corporation Law, sec. 160, ss. 3, no. 9.

tion Law, which requires a separate caption for these loans in the balance sheet.[93]

Additional Disclosure

The flexible nature of EEC accounting requires that adequate explanations be given in case the uniform accounting rules have not been followed, regardless of the reasons. The possibilities of such deviations were explained above. The more important cases where a deviation might be practicable may be summarized as follows.

1. *Changes in consistency.*

Fair reporting requires that changes in consistency and their effect on the results for the year be disclosed and adequately justified. In our opinion, this will be one of the most important comments in the annex.[94]

But when is it a change in consistency, however? Here the "vacuum" often noted is again revealed. When is a change "material"? The authors of the German Stock Corporation Law were not theorists; they left the decision to the reporting company. Nor were they so unrealistic as to assume that this always could be solved by the public accountant. They specified definite rules that can measure arithmetically whether a change in consistency has occurred or not:

> If as a result of a change in the valuation and depreciation method, including extraordinary depreciation or reserves for decline in value, a net profit or loss for the year is shown which is more than ten percent above or below the amount that would be shown without such change, such difference shall be shown if it exceeds one-half of one percent of the stated capital.[95]

While there may be good reasons to consider this rule too rigid, anyone who has been confronted with the vital and — for some companies — sometimes crucial question, "Is it material?", will agree that some guideline in such a dilemma probably can assure a faster and closer "harmonization" of the accounting rules of the various EEC countries, and for that matter of the public accounting profession in Europe.

2. *Accruals.*

Of almost equal importance for EEC accounting is the requirement that accruals be analyzed and "justified" in the annex.[96]

---

[93] German Stock Corporation Law, sec. 151.
[94] Statute, art. 28, ss. 1(a).
[95] German Stock Corporation Law, sec. 160, ss. 2, last sentence.
[96] See footnote 48.

3. *Deviations from the valuation rules.*

Any deviations from the uniform valuation rules must be reported.[97] This again is self-explanatory; as no intercompany comparison otherwise would be possible. Similarly, special write-downs will need to be explained.[98]

4. *Revaluation methods.*

Clearly, any revaluation of fixed assets, investments, or inventories cannot be understood and evaluated without additional explanations and justifications. These must be presented in the annex.[99]

5. *Nonamortization of foundation and expansion expenses and of costs for research and development.*

The propriety of deferring these expenses is not universally accepted.[100] The compromise found, as was explained above, is to show them separately in the balance sheet and to amortize them over a maximum period of five years. The committee felt that it had to compromise further: these expenses need not be amortized over the maximum period, but then no profit can be distributed unless an equitable amount is included in reserves. In any event, the reason for the nonamortization must be given in the annex.[101]

6. *Special write-down on assets to benefit from a tax law.*

It is also understood that such a deviation from proper valuation must be explained in the annex. The new EEC law goes further in this respect and is more specific than the comparable German law. It demands that the amount of the special write-down be stated, while German law does not specifically call for such a disclosure to be made in the German "business report."[102]

7. *Deviation from the uniform statements.*

If an item can be classified under more than one heading, this must be indicated parenthetically in the financial statements,[103] and if either the balance sheet or the statement of income has been prepared

---

[97] Statute, art. 3.
[98] Statute, art. 331 (d); art. 361 (c).
[99] Statute, art. 30, ss. 1, para. 2; art. 31, ss. 1, para. 2.
[100] Motives, p. 26, left col.
[101] Statute, art. 32, ss. 2, and art. 34.
[102] German Stock Corporation Law, sec. 160, ss. 2.
[103] See footnote 47.

in a form deviating from the model statements, such a deviation must be explained in the annex.[104]

The question that immediately comes to mind is what is the advantage of such a "different statement." Naturally, it may be developed from the books of a particular company, but if one must provide the standard information in any event, in the annex, will it then not be easier and more economical to revise the system of accounts in such a way that they automatically generate the standard statements?

ANNUAL REPORT TO STOCKHOLDERS[105]

It is only logical that uniform accounting rules shall also cover the annual report to stockholders, which actually is the reporting forum of management. The committee has attempted to harmonize its accounting aspects. Customarily in Germany[106] such a report is called the "Report on the Situation of the Company."

The directive uses the same definition: "It must explain in detail the business transactions and the situation of the company and in particular events which occurred after the close of the business year."[107] Finally, it must present a projection of future profits.[108]

The committee must be commended for refraining from too much perfectionism in this respect. For instance, the number of years that this projection must cover is not specified, as a meaningful reporting period will vary from branch to branch.

CONCLUSION

The draft of the fourth directive, written before Great Britain joined the EEC, and, therefore, devised without the active and direct influence of that country's accounting profession, is the first attempt to harmonize the diverse European accounting conventions. Of necessity a compromise, it is consequently broadly phrased, and is generally imperfect in many ways. It intends to be flexible in that it respects the different methods and procedures permitted by national laws. Thus, it consciously acknowledges the role of national legislatures

[104] Statute, art. 28, ss. 2.
[105] Statute, art. 43, ss. 1.
[106] German Stock Corporation Law, sec. 160.
[107] Statute, art. 43, ss. 2.
[108] Ibid.

of the different countries although the directive's avowed purpose is to harmonize European accounting practices. One might suggest that the council of the EEC ministers, sometime in the future when it acts upon the final version of the fourth directive, leave the adoption of such alternative methods and procedures to the individual companies, because, it may be reasoned, the better methods should prevail.

Exhibit A. Balance Sheet

A. UNPAID CAPITAL STOCK (including DM...called up)...DM....

B. EXPENSES FOR THE FORMATION OF THE ENTERPRISE TO THE EXTENT TO WHICH NATIONAL LAW PERMITS SUCH A CAPITALIZATION................

C. FIXED ASSETS
- I. Intangible assets
  - a. Research and development expenses to the extent to which national law permits a capitalization........
  - b. Trade rights, patents, licenses, trade marks, and similar rights and assets to the extent to which they
    - 1. have been acquired against compensation and do not fall under C..........................
    - 2. are developed by the company to the extent to which national law permits such a capitalization
  - c. Acquired goodwill ....
  - d. Downpayments for suppliers of intangible assets.......
- II. Tangible assets
  - a. Land and buildings................................
  - b. Plant and machinery..............................
  - c. Other machinery, factory, and office equipment.......
  - d. Downpayments for suppliers of capital equipment and fixed assets under construction..................
- III. Investments and other long-term financial assets
  - a. Stock in affiliated companies......................
  - b. Receivables from affiliated companies..............
  - c. Investments ....
  - d. Receivables from enterprises carried as investment....
  - e. Long-term financial assets.........................
  - f. Other long-term accounts receivable................
  - g. Own shares (nominal amount or unit amount) to the extent to which national law permits a capitalization

D. CURRENT ASSETS
- I. Inventories
  - a. Raw materials and supplies.......................
  - b. Work in process including scrap....................
  - c. Finished products and goods held for resale..........
  - d. Downpayments for suppliers of inventories...........
- II. Accounts receivable (Show in parentheses the residue amount due within one year)
  - a. Trade accounts receivable.........................
  - b. Intercompany accounts receivable..................
  - c. Receivables from enterprises carried as investments...
  - d. Other receivables ....

Exhibit A. Balance Sheet Continued

III. Marketable securities and other liquid assets DM....
- a. Stock in affiliated companies........................
- b. Notes receivable ....
- c. Deposits with banking institutions, postal checking accounts, checks, and cash on hand.................
- d. Own shares (nominal amount or unit amount) to the extent to which national law permits a capitalization
- e. Other marketable securities........................

E. DEFERRED DEBITS ....

F. LOSS
- I. Loss for year.......................................
- II. Loss carry forward..................................

A. REGISTERED CAPITAL (To be subdivided by classes and by nominal amounts or unit amounts........................

B. RESERVES
- I. Legal reserve ....
- II. Premium reserve ....
- III. Revaluation reserve ....
- IV. Reserve against treasury shares ....
- V. Statutory reserves ....
- VI. Free reserves ....

C. VALUE CORRECTIONS TO THE EXTENT TO WHICH THEY HAVE NOT BEEN DEDUCTED ON A SEPARATE LINE FROM THE RESPECTIVE ASSETS OR HAVE NOT BEEN DETAILED IN THE ANNEX
- I. On expenses for the formation and expansion of the enterprise ....
- II. On intangible assets.................................
- III. On tangible assets...................................
- IV. On investments and other long-term financial assets......
- V. On inventories ....
- VI. On current accounts receivable......................
- VII. On marketable securities and other liquid assets........ (A subdivision similar to that on the assets side must be made)

D. ACCRUALS
- I. Pension liability and similar obligations................
- II. Income tax accrual for deferred tax liability............
- III. Other accruals ....

Exhibit A. Balance Sheet Concluded

E. LIABILITIES DM....

(Show in parentheses the amount due within one year, due after five years, and amounts collateralized) ....

I. Bonds (thereof convertible DM....) ....

II. Due to banks ....

III. Downpayments received from customers ....

IV. Trade accounts payable ....

V. Notes payable ....

VI. Intercompany accounts payable ....

VII. Due to enterprises carried as investment ....

VIII. Other accounts payable ....

F. DEFERRED CREDITS ....

G. PROFIT

I. Profit for year ....

II. Profit brought forward ....

Exhibit B. Balance Sheet

DM....

A. UNPAID CAPITAL STOCK (including DM....called up)..

B. EXPENSES FOR THE FORMATION AND EXPANSION OF THE ENTERPRISE TO THE EXTENT TO WHICH NATIONAL LAW PERMITS SUCH A CAPITALIZATION....

C. FIXED ASSETS
- I. Intangible assets
  - a. Research and development expenses to the extent to which national law permits a capitalization........
  - b. Trade rights, patents, licenses, trade marks, and similar rights and assets to the extent to which they
    - 1. have been acquired against compensation and do not fall under C..........................
    - 2. are developed by the company to the extent to which national law permits such a capitalization
  - c. Acquired goodwill ....
  - d. Downpayments for suppliers of intangible assets......
- II. Tangible assets
  - a. Land and buildings..............................
  - b. Plant and machinery.............................
  - c. Other machinery, factory, and office equipment.......
  - d. Downpayments for suppliers of capital equipment and fixed assets under construction..................
- III. Investments and other long-term financial assets
  - a. Stock in affiliated companies......................
  - b. Receivables from affiliated companies..............
  - c. Investments ....
  - d. Receivables from enterprises carried as investments...
  - e. Long-term financial assets.........................
  - f. Other long-term accounts receivable................
  - g. Own shares (nominal amount or unit amount) to the extent to which national law permits a capitalization

D. CURRENT ASSETS
- I. Inventories
  - a. Raw materials and supplies........................
  - b. Work in process including scrap...................
  - c. Finished products and goods held for resale..........
  - d. Downpayments for suppliers of inventories...........
- II. Accounts receivable (Show in parentheses the residue amount due within one year)
  - a. Trade accounts receivable.........................
  - b. Intercompany accounts receivable..................
  - c. Receivables from enterprises carried as investment....
  - d. Other receivables ....

Exhibit B. Balance Sheet Continued

	DM....
III. Marketable securities and other liquid assets	
a. Stock in affiliated companies....................	
b. Notes receivable	
c. Deposits with banking institutions, postal checking accounts, checks and cash on hand................	
d. Own shares (nominal amount or unit amount) to the extent to which national law permits a capitalization	
e. Other marketable securities.......................	
E. DEFERRED DEBITS	
F. LIABILITIES DUE WITHIN ONE YEAR (Show in parentheses the amount of accounts payable [collateralized])	
I. Bonds (thereof convertible DM....).................	
II. Due to banks.....................................	
III. Downpayments received from customers...............	
IV. Trade accounts payable............................	
V. Notes payable	
VI. Intercompany accounts payable......................	
VII. Due to enterprises carried as investment...............	
VIII. Other accounts payable............................	
G. CURRENT ASSETS IN EXCESS OF LIABILITIES DUE WITHIN ONE YEAR............................	
H. TOTAL ASSETS AFTER DEDUCTION OF LIABILITIES DUE WITHIN ONE YEAR...........................	
I. LIABILITIES NOT DUE WITHIN ONE YEAR (Show in parentheses the amounts due after five years and amounts collateralized)	
I. Bonds (thereof convertible DM ....).................	
II. Due to banks.....................................	
III. Downpayments received from customers...............	
IV. Trade accounts payable............................	
V. Notes payable	
VI. Intercompany accounts payable......................	
VII. Due to enterprises carried as investment...............	
VIII. Other accounts payable............................	
J. VALUE CORRECTIONS TO THE EXTENT TO WHICH THEY HAVE NOT BEEN DETAILED IN THE ANNEX	
I. On intangible assets..............................	
II. On tangible assets................................	
III. On investments and other long-term financial assets......	
IV. On inventories	
V. On current accounts receivable......................	
VI. On marketable securities and other liquid assets.........	
(A subdivision similar to that on the assets side must be made)	

Exhibit B. Balance Sheet Concluded

	DM....
K. ACCRUALS	
I. Pension liability and similar obligations................	
II. Income tax accrual for deferred tax liability............	
III. Other accruals	
L. DEFERRED CREDITS	
M. REGISTERED CAPITAL	
(To be subdivided by classes and by nominal amounts or unit amounts)	
N. RESERVES	
I. Legal reserve	
II. Premium reserve	
III. Revaluation reserve	
IV. Reserve against treasury shares.......................	
V. Statutory reserves	
VI. Free reserves	
O. PROFIT FOR YEAR	
P. PROFIT BROUGHT FORWARD	

Exhibit C. Statement of Income

	DM....
I. Results from operations (except for operating expenses and income disclosed under II.)	
a. Net sales	
b. Increase (decrease) in inventories of finished goods and work in process	
c. Cost of self-constructed assets	
d. Other operating income	
e. Cost of materials used	
f. Employment costs	
g. 1. Value corrections on the expenses for the formation and expansion of the enterprise and on intangible and tangible fixed assets	
2. Value corrections on current assets	
h. Other operating expenses	
i. Results from operations	
II. Financial result	
a. Income from investments (including DM....from affiliated companies)	
b. Income from other marketable securities and accounts receivable carried as fixed assets (including DM.... from affiliated companies)	
c. Other interest and similar income (including DM.... from affiliated companies)	
d. Value corrections on investments and other financial assets and on marketable securities carried as current assets	
e. Interest and similar financial charges (including DM ....paid to affiliated companies)	
f. Financial result	
III. Extraordinary income and expenses	
a. Extraordinary income	
b. Extraordinary expenses	
c. Extraordinary result	
d. Income before taxes on income	
IV. Taxes	
a. Taxes on income	
1. actual	
2. deferred	
b. Other taxes, not included in I., II., or III.	
V. Net result for year	

Exhibit D. Statement of Income

EXPENSES	DM....
I. Operating expenses (except for operating expenses disclosed under II.)	
a. Decrease in inventories of finished goods and work in process	
b. Cost of materials used	
c. Employment costs	
d. 1. Value corrections on the expenses for the formation and expansion of the enterprise and on intangible and tangible fixed assets	
2. Value corrections on current assets	
e. Other operating expenses	
II. Financial expenses	
a. Value corrections on investments and other financial assets and on marketable securities carried as current assets	
b. Interest and similar financial charges (including DM....paid to affiliated companies)	
III. Extraordinary expenses	
IV. Taxes	
a. Taxes on income	
1. actual	
2. deferred	
b. Other taxes to the extent not included in I., II., or III.	
V. Net result for year	

INCOME	DM....
I. Operating income (except for operating income disclosed under II.)	
a. Net sales	
b. Increase in inventories of finished goods and work in process	
c. Cost of self-constructed assets	
d. Other operating income	
II. Financial income	
a. Income from investments (including DM ....from affiliated companies)	
b. Income from other marketable securities and accounts receivable carried as fixed assets (including DM....from affiliated companies)	
c. Other interest and similar income (including DM....from affiliated companies)	
III. Extraordinary income	
IV. Net result for year	

Exhibit E. Statement of Income

	DM....
I. Results from operations (except for operating expenses and income disclosed under II.):	
a. Net sales	....
b. Cost of sales (including applicable value corrections)	....
c. Gross margin	....
d. Selling expenses (including applicable value corrections)	....
e. General administrative expenses (including applicable value corrections)	....
f. Other operating income	....
g. Results from operations	....
II. Financial result:	
a. Income from investments (including DM....from affiliated companies)	....
b. Income from other marketable securities and accounts receivable carried as fixed assets (including DM....from affiliated companies)	....
c. Other interest and similar income (including DM....from affiliated companies)	....
d. Value corrections on investments and other financial assets and on marketable securities carried as current assets	....
e. Interest and similar financial charges (including DM....paid to affiliated companies)	....
f. Financial result	....
III. Extraordinary income and expenses:	
a. Extraordinary income	....
b. Extraordinary expenses	....
c. Extraordinary result	....
d. Income before taxes on income	....
IV. Taxes:	
a. Taxes on income:	
1. actual	....
2. deferred	....
b. Other taxes, not included in I., II., or III.	....
V. Net result for year:	....

Exhibit F. Statement of Income

EXPENSES	DM....	INCOME	DM....
I. Operating expenses (except for operating expenses disclosed under II.)		I. Operating income (except for operating income disclosed under II.)	
a. Cost of sales (including applicable value corrections)	....	a. Net sales	....
b. Selling expenses (including value corrections)	....	b. Other operating income	....
c. General administrative expenses (including applicable value corrections)	....	II. Financial income	
II. Financial expenses		a. Income from investments (including DM ....from affiliated companies)	....
a. Value corrections on investments and other financial assets and on marketable securities carried as current assets	....	b. Income from other marketable securities and accounts receivable carried as fixed assets (including DM....from affiliated companies)	....
b. Interest and similar financial charges (including DM....paid to affiliated companies)	....	c. Other interest income and similar income (including DM....from affiliated companies)	....
III. Extraordinary expenses	....	III. Extraordinary income	....
IV. Taxes		IV. Net result for year	....
a. Taxes on income			
1. actual	....		
2. deferred	....		
b. Other taxes to the extent not included in I., II., III.	....		
V. Net result for year	....		

ONE YEAR'S SUBSCRIPTION TO *THE INTERNATIONAL JOURNAL OF ACCOUNTING EDUCATION AND RESEARCH*

Volume 1, Numbers 1 and 2 (1965–66)	$3.00
Volume 2, Numbers 1 and 2 (1966–67)	3.00
Volume 3, Numbers 1 and 2 (1967–68)	3.00
Volume 4, Numbers 1 and 2 (1968–69)	3.00
Volume 5, Numbers 1 and 2 (1969–70)	3.00
Volume 6, Numbers 1 and 2 (1970–71)	3.00
Volume 7, Numbers 1 and 2 (1971–72)	3.00
Single copy issue	1.80

OTHER PUBLICATIONS OF THE CENTER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING

A Statement of Basic Accounting Postulates and Principles (English Edition)	1.00
A Statement of Basic Accounting Postulates and Principles (Spanish Edition)	1.00
Theory of Accounts in Double-Entry Bookkeeping, by Karl Käfer	2.00
The Evolution of Direct Costing, by Charles Weber	2.00
The Nature and States of Accounting Development in Latin America, by Edward Elliott	2.50
Input-Output Analysis and Its Application to Business Accounting, by Shawki Farag	2.50
The Role of Accounting in the Economic Development of England 1500–1750, by James O. Winjum*	3.00
Thoughts on Accounting, by A. C. Littleton*	3.00
Pagatoric Theory of Financial Income Determination, by Erich Kosiol*	3.00

* In preparation

TER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING

VOLUME 8, NUMBER 1, FALL 1972

THE INTERNATIONAL JOURNAL OF ACCOUNTING

EDUCATION AND RESEARCH

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

CENTER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING OF THE COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION

The Center for International Education and Research in Accounting was established to foster the international development of education and research in the accounting discipline, to provide a base for the international exchange of ideas and materials relating to accounting education, to encourage and assist both accounting faculty personnel and students from other countries to come to the University of Illinois for study and research in accounting, and to provide faculty members for assignment to universities in other countries.

The Center, functionally and administratively, is a constituent part of the Department of Accountancy and the College of Commerce and Business Administration of the University of Illinois. The graduate training of a substantial number of international students has been an important activity of the Department for many years.

One of the specific goals of the Center is the publication of reports, booklets, and monographs which further the cause of advanced education and research in accounting.

V. K. Zimmerman, *Director*

The International Journal of Accounting *Education and Research* is published semiannually, spring and fall, by the Center for International Education and Research in Accounting, College of Commerce and Business Administration, University of Illinois. Subscription rates are $3.00 per year. Single copy price is $1.80. Copies of prior issues are still available.

Manuscripts and communications for the Editor and business correspondence should be addressed to **The International Journal of Accounting** *Education and Research*, 320 Commerce West, University of Illinois, Urbana, Illinois 61801.

THE INTERNATIONAL JOURNAL OF ACCOUNTING

EDUCATION AND RESEARCH

Volume 8 · Number 1 · Fall 1972

CENTER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Contents

Accounting Yesterday, Today, and Tomorrow

ANDREW BARR*

The first in this series of lectures in honor of Weldon Powell Memorial Professors in Accountancy recognized Professor A. C. Littleton. Professor Littleton, as all students of accountancy know, has brought great distinction to the profession, himself, and the University of Illinois at Urbana-Champaign which he served for many years. Professor William J. Vatter's address on that inaugural occasion in May 1969, paid appropriate tribute to Weldon Powell as well as to Professor Littleton. This address was printed as the lead item in the fall 1969 issue of *The International Journal of Accounting Education and Research.*

As a contemporary of Weldon Powell, I consider it a privilege to add a few words to those of Professor Vatter about the man remembered by this professorship. Since Professor Vatter spoke, Haskins & Sells has published the history of that firm. This history permits me to confirm my recollection of how Haskins & Sells had the good fortune

* Andrew Barr served as visiting professor of accountancy during the second semester of the 1971-72 academic year at the University of Illinois at Urbana-Champaign. Mr. Barr holds both a bachelor's and master's degree from the University of Illinois at Urbana-Champaign and is a CPA. He is generally recognized as one of the most distinguished accountants in the United States. He is one of only thirty-three individuals elected to the Accounting Hall of Fame. Mr. Barr is, perhaps, best known for his many years of dedicated service as chief accountant of the Securities and Exchange Commission. He received the President's Award for Distinguished Federal Civilian Service, the Distinguished Service Award of the American Institute of Certified Public Accountants and the Alpha Kappa Psi Award. He also served as president of the Federal Government Accountants Association and as a vice president of the American Accounting Association. He was a member of the Yale University faculty for twelve years.

to add one of Illinois' outstanding accountancy students to its staff. Vatter says Weldon helped John Wildman write a book on no-par value stock — an interesting and important accounting subject of the 1920s. John R. Wildman was in charge of professional training for that firm — one of the first to recognize the value of university training in accountancy. Let us refer to the Haskins & Sells record.

At a meeting of the American Association of University Instructors in Accounting at Urbana, Wildman's attention was drawn to Weldon Powell's thesis on "Some Principles in Accounting for No-Par-Value Capital Stock" and its logic and clarity appealed to him. It was natural for Professor Scovill to speak well of Weldon Powell, and as a result Wildman offered Powell a position with Haskins & Sells in New York. Powell accepted and was given the post of junior assistant accountant for the professional training staff on June 16, 1924, at $35.00 a week, essentially the salary at which he would have remained with the University of Illinois at Urbana-Champaign as a teacher. In the Technical Procedure Department he assisted Mr. Wildman in connection with the Haskins & Sells Bulletin, and in the development of technical procedures.[1]

Mr. Powell wrote extensively on technical accounting subjects and made many addresses both in the United States and abroad. His University of Illinois thesis was expanded into a book — coauthored by John R. Wildman "Capital Stock Without Par Value," published in 1928. It remained a classic in its field.[2]

Based upon the years since our days in graduate school, I could say much more about Weldon Powell — but we must turn our attention to Professors Norton M. Bedford and Robert K. Mautz, the present holders of the Weldon Powell Professorships.

Professors Mautz and Bedford were honored at a Weldon Powell Memorial lecture in early May 1970. On that occasion Tom Wise discussed "Accounting Principles and Social Expectations." John L. Carey introduced him. John Carey had only recently retired as administrative vice-president and long-time executive director of the American Institute of Certified Public Accountants, and for the school year then ending was visiting professor of accountancy at the University of Illinois at Urbana-Champaign, an experience I know he enjoyed very much. On that occasion the incumbents were honored at the close of their first year and now we do so again near the completion of their third appointment. Both are well-known in this country and abroad for their contributions to the literature of accounting and to the development of the profession. Further elaboration of their biographies hardly seems necessary.

---

[1] *Haskins & Sells, Our First 75 Years* (New York: Haskins & Sells 1970), p. 56.
[2] *Ibid.*, p. 58.

My title for this paper was suggested to me for another occasion as being broad enough to cover anything I might want to say. My sponsors here, I think, were fearful that I might brief A. C. Littleton's *Accounting Evolution to 1900* and take so long doing it that I might never bring that history down to date and, certainly, have no time for projections into the future. A few references to events of the last fifty years should suffice, however, as a basis for a cautious guess or two about what might happen tomorrow.

Three years ago Professor Vatter, in his paper referred to above, entitled "Progress in the Pursuit of Principles," described six examples to "throw light on the issues — not merely to show that progress has been disappointing, but rather to indicate how the nature of the pursuit of principles has changed, perhaps to suggest why the pursuit still continues." R. J. Chambers of the University of Sydney in Australia and well known here for his views on accounting is quoted in *The Journal of Accountancy* for March 1972, under the title, "The Anguish of Accountants." He has advice for the American Institute of Certified Public Accountants and the American Accounting Association. He seems to write off the Wheat Committee effort as unnecessary. In effect, he says we should get on with the business with a proper division of effort between practitioners and researchers who should respect "each other's function, skill, and duty." He says, "Medical, legal, and engineering principles are not established by democratic vote or deliberation of technically uninformed. Neither should accounting principles be so established." And in the *Financial Analysts Journal* for March/April 1972, in its section on Accounting for Financial Analysis we find an article by Lee J. Seidler, CPA, with the eye-catching title, "The Chaos in Accounting: Will It Continue?" Seidler says most analysts are baffled by what he calls "The Second American Accounting Revolution" which "started about three years ago and will certainly continue for at least another five." The first revolution, he says, occurred during the 1940s — growing out of the bull market of the 1920s. Some of his remarks sent me to rummaging in old files and books covering the same period of fifty years that he does in this article, which, incidentally, should be read carefully and critically to avoid being carried completely away by his vivid writing.

EARNINGS PER SHARE

One topic that appears in several places in Seidler's article is earnings per share. Any accounting decision affecting the determination of

income has some effect on this much-used and much-criticized figure. Seidler says net income received little consideration in the 1920s except as an indicator of ability to maintain the dividend rate. It follows, of course, from this that earnings per share must have received little attention. A limited search of the literature supports this conclusion. The only readily available reference I found is in Stephen Gilman's *Analyzing Financial Statements* published in 1925. On page 196 in a chapter on profit and loss analysis we find the following brief comment:

> Net Profits per Share of Stock — Another ratio popular with investors is "net profits per share of stock outstanding."
>
> This is obtained by dividing the net profits (less the amount of preferred dividends) by the number of shares of common capital stock outstanding at the end of the year. It affords a good check on the stock market quotations, but as a general tool of analysis, it possesses little merit.[3]

Life was simple in those days! Stewart-Warner applied Gilman's rule in the chairman's letter for 1927 (possibly earlier as a comparison is made with 1926, but I don't have any earlier reports). This is the earliest example I found in my small collection of old reports. The practice seems to have increased in the early 1930s. General Motors Corporation in its annual reports for 1930, 1931, and 1932 which I have (and possibly earlier than this) referred to earnings per share in the letter to stockholders and reported the amount earned on common capital stock in the comparative two-year summary of consolidated income. The amounts per share were reported before and after extraordinary and nonrecurring losses, and nonoperating profit and, beginning in 1932, on the average number of shares outstanding as is required today.

Seidler refers to Accounting Principles Board (APB) Opinion Number 15 as the first real battle of the current revolution and comments that "here, the APB dispensed with all pretense of concern with accounting theory and issued a completely arbitrary pronouncement designed solely to produce a uniform, albeit distorted, method of reporting per share income figures." Those familiar with the situation at the time knew that Opinion 15 was issued to settle the debate over the definition of a residual security in paragraph thirty-three of APBO 9. This was done in collaboration with appropriate representatives of the SEC, and APBO 15 became authoritative support on the subject.

[3] Stephen Gilman, *Analyzing Financial Statements* (New York: Ronald Press Company, 1925), p. 196.

Other reports in a small collection of forty years ago showing earnings per share in the text, or elsewhere, include Paramount Publix, 1930 (a three-year table showing profits, average number of shares outstanding and earnings per share); American Agricultural Chemical Company, 1935 (profits as well as net amounts per share outstanding at end of the year); American Telephone and Telegraph Company (twenty year table 1911-1930 showing net earnings per share based on average number of shares of capital stock outstanding during the year compared with dividends paid); Commonwealth Edison Company (comparative quarters and twelve months ended March 31, 1933, and 1934 before and after allocation of 1933 year-end adjustments on "shares in the hands of the public"); Columbia Gas & Electric Corporation (three years, 1928, 1929, and 1930 — on shares outstanding at the end of the year after adjustment for a stock split and stock dividend); Engineers Public Service Company, 1929 and 1930 (on average shares outstanding during the period); and Southern California Edison Company Ltd., 1932 (table headed Comparative Statistics of Progress, 1923-1932 Inclusive includes Average Number of Shares of Common Stock, Net per share — Common, Dividend rate — Common). None of these could have been influenced in any way by the Securities and Exchange Commission (SEC) as no rules had yet been developed on this subject.

A registration statement of The Chesapeake Corporation for $18,000,000 ten-year 5 percent cenvertible collateral trust bonds was filed with the SEC under the Securities Act of 1933 as amended. The prospectus dated December 21, 1934 includes a table showing for the Chesapeake and Ohio Railroad Company the number of shares outstanding at December 31, 1924 to 1933, the earnings per share for each of the ten years and the price range of the stock. A supplemental table includes condensed earnings statements for the months of November, 1933, and 1934, and for the eleven months ended November 30 of those years. These statements include earnings per share of common stock. The prospectus included the required three years and interim period income statements but no summary of earnings as we know it today was included. It was not required.

This was a period when there was great competition among designers of charts intended to aid investors. Among other items are found earnings per share compared with dividends paid. An advertising brochure published in 1936 by one of these firms is entitled, "A Short-Cut to Investment Values" and commends its charts as com-

plying with the Chinese proverb, " 'Ten Thousand' Figures in a Single Picture." The figures include earnings and dividends per share and price earnings ratios. My archives include a May 1930 National Stock Analysis booklet listing stocks by industry, price indexes, activity, performance (net earnings per share), dividend record, and capital structure. The inside front cover contains an explanation of the method of computing earnings per share, price times earnings, times dividends earned, and says that "net worth" represents the actual equity of the preferred and common stockholders in the company and is composed of the sum total of the following items: preferred stock, common stock, capital reserves, capital, and Profit and Loss surplus."

George O. May had something to say about all this in his *Financial Accounting* published in 1943. He criticized a paragraph in the 1941 American Accounting Association's "Accounting Principles Underlying Corporate Financial Statements" dealing with earnings per share which was not repeated in the 1948 version. Mr. May used this paragraph to show that use of the single figure of earnings per share as a satisfactory yardstick to measure performance "is merely an objective of wishful thinking."

Mr. May's further comment is pertinent today:

> The war has emphasized the inadequacy of a single figure for the purpose to which it is commonly put, and the time would seem to be opportune for the accounting profession, with the cooperation of the Securities and Exchange Commission, to make a drive against the use of "earnings per share" as they have successfully done against the use of "net worth." This campaign would doubtless be long and arduous, and until it has been successfully conducted the problem of indicating in the statement of income and surplus the figure to be adopted as the net income per share will have to be faced.

The campaign against the use of "net worth" was relatively easy to win on theoretical ground when its improper use would connote a current value basis of accounting. Such a basis for public companies is limited to investment companies carrying investments at market or fair value as found in good faith by the board of directors rather than at cost.

The commission did put its weight into the campaign to limit the use of income per share figures by joining the efforts of the profession, the financial analyst societies and the New York Stock Exchange to do so.

Recognizing that the widespread use of earnings per share figures in the financial community was likely to persist, the commission came to the conclusion that registration forms should be amended to re-

quire their inclusion in summaries of earnings on a controlled basis of calculation. At a later date support was given to the inclusion of the statement of source and application of funds as one of the basic financial statements. This step was taken as part of the effort to halt the growing confusion from the use of "cash flow" or "cash income" per share. This was a joint effort of the profession, financial analysts, the stock exchanges, and the commission.

There seems to be a craving on the part of some creditmen and analysts to reduce their appraisal of a business to a single figure. Let me give you another example which may be in the past tense. I refer to the weighting of standard financial ratios and the production of a single composite figure as an indicator of the strength of the company being rated. A convenient way to trace this idea and the criticism it has received is through the editions of the *Accountants' Handbook*. The first edition edited by E. A. Saliers was published in 1924. The short chapter on Financial Statements relies heavily on J. H. Bliss, *Financial and Operating Ratios in Management* and on the third edition of Montgomery's *Auditing Theory and Practice*. There is no suggestion here for a composite index.

W. A. Paton edited the second edition of the *Handbook* which appeared in 1932. Here we find a description of the method of indexing credit strength recommended by Wall and Duning in their book *Ratio Analysis of Financial Statements*. Wall and Duning's book was used in the American Institute of Banking courses in the late 1920s (how long thereafter I do not know). Paton warns that "this method of ratio analysis should be used with caution, since it tends to give too great an air of finality to the resulting index." Another way to put it is that the farther away from the basic financial statements you get, the less confidence you should have in the figures. The third edition of the *Handbook* (1943) repeats the warning of the second edition and adds the comment that "statement analysis is more an individual judging than a statistical operation." Wixon as editor of the fourth edition (1956) retains a description of the method and expands on the comment I have quoted by calling attention to Paton's *Essentials of Accounting:*

> It needs to be recognized that ratios are not a satisfactory substitute for judgment. Calculation of ratios is nothing more than a means of focusing attention on relationships worthy of careful observation and study. In general ratios are clues, not bases for immediate conclusions.

In the fifth edition (1970) description of the idea is compressed into

two short sentences. Paton's criticism is repeated and Myer (*Financial Statement Analysis*) is quoted as harshly condemning the procedure in the following words:

> It implies a homogeneity and precise significance that the ratios cannot possibly possess. If such a procedure could logically be followed, it would be highly desirable, but it is contrary to the nature of the financial statement data and so must be regarded as a fantastic dream. However, it shows how seductive statistical methods may become to one who does not properly understand them.

Is it possible that this comment could be applied to some of the current critics of financial statements? It should be noted here that Professor Bedford is one of the editors of this edition.

DISCLOSURE OF SALES AND COST OF SALES

The exchange of correspondence between the Special Committee on Cooperation with Stock Exchanges and the New York Stock Exchange, 1932-34, is quite properly cited as a most significant event in the development of accounting in the United States. Vatter discussed the matter of principles, I want to deal with disclosure, particularly in the income statement. The committee's letter of September 22, 1932, which was placed in evidence in a hearing before the United States Senate Committee on Banking and Currency, January 12, 1933, was summarized to four principal objects which the Committee thought the Exchange should keep in mind and do its best gradually to achieve.

The third object was:

> To emphasize the cardinal importance of the income account, such importance being explained by the fact that the value of a business is dependent mainly on its earning capacity; and to take the position that an annual income account is unsatisfactory unless it is so framed as to constitute the best reflection, reasonably obtainable, of the earning capacity of the business under the conditions existing during the year to which it relates.

Exhibit I to the committee's letter suggested broad principles of accounting which at a later date were adopted by the membership of the institute. I suspect Exhibit II, which suggested the content of the financial statements, received less attention and has been forgotten by most accountants who may have been aware at one time of its existence. The latter exhibit with respect to the income account suggested that:

> The form should be such as to show separately (a) operating income; (b) depreciation and/or depletion if not deducted in arriving at (a), in which case the amount of the deduction should be shown; (c) income from

companies controlled but not consolidated (indicating the nature thereof); (d) other recurring income; (e) any extraordinary credits; (f) charges for interest; (g) income taxes and (h) any extraordinary charges.

Here we detect a pattern for the profit and loss statements prescribed by the Federal Trade Commission in Form A-1 approved July 6, 1933, under the Securities Act of 1933. This form's first two items are: "Gross sales (less returns and allowances),[1]" "Cost of goods sold (exclusive of expenses specifically set forth below).[1]" The footnote says "these items to be shown unless the business of the issuer would be injured thereby. . . ."

Exhibit II of the form, by suggesting that the income account start with operating income, certainly invites the omission of sales and cost of sales, which was a common practice of the time, if indeed an income account was published. Just when this permissiveness in Form A-1 disappeared I cannot say but, as I shall show, the issue came to a head with the passage of the Securities and Exchange Act of 1934 which contained a provision (Sec. 24) for confidential treatment of trade secrets or processes.

We do not have the time to review this problem in detail but it may be noted here that Saliers reproduced two forms of profit and loss statements in 1924, both of which included sales and cost of sales. They were the Federal Reserve Board form and a form A. Lowes Dickinson included in his paper on "The Profits of a Corporation" presented at the First International Congress of Accountants in St. Louis in 1904.

Following the enactment of the Securities Exchange Act of 1934, Commissioner James M. Landis, who later succeeded Joseph P. Kennedy as chairman, addressed the New York State Society of Certified Public Accountants on certain of the requirements of this act. A paragraph under the caption "Requires Gross Sales and Cost of Goods Sold" fits into this discussion:

A second feature of the financial statements is the insistence in the profit and loss statement upon gross sales and cost of goods sold. The importance of these figures to the investor are (sic) self-evident. Indeed, no other figures in the financial statements can, with the exception of net income, rank in equal importance with them. Obviously, the commission is justified in calling for them. At the same time, it is to be recognized that in unusual circumstances, nondisclosure of these items may, perhaps, be justified, due to the extraordinary competitive nature of the enterprise in which the corporation may be engaged. Fortunately, from the standpoint of the investor, hesistancy on the part of corporations to the disclosure of these and other matters is not general. A recognition that the corporation, as a trustee of other peoples' money, owes

a general duty of disclosure to its beneficiaries is not something that the commission need exercise the power of government generally to enforce. Indeed, my observation and my contacts lead me to the conclusion that this is a doctrine whose acceptance is more general than otherwise, and whose further acceptance needs only the encouragement and protection of government rather than the exercise of its power.[4]

It was not long, however, before some companies tried to avoid this disclosure by invoking the confidential treatment provision. The commission's Sixth Annual Report to Congress for the Fiscal Year Ended June 30, 1940 reports the successful conclusion through the courts of the American Sumatra Tobacco Corporation case. The commission was upheld in its denial of confidential treatment of gross sales and cost of goods sold. The issue was raised again after the 1964 amendments to the 1934 Act with the same result without going to court.

With the growth of conglomerate enterprises and the resultant obscuring of operations of the formerly independent businesses, the cry went up that consolidated financial statements concealed more than they revealed, and hence some breakdown of the activities of these companies by products, divisions, or lines of business was necessary for the investor and others concerned. This story has been told many times but should be mentioned here as Professor Mautz conducted the study for the Financial Executives Institute, the completion of which the SEC agreed to await before undertaking rule making and form revision to require disclosures not then being made to any great extent in filings with the commission or in reports to stockholders. These disclosures are required under the description of the business in commission forms — not part of the formal financial statements covered by the independent accountant's opinion. This latter problem is under consideration by the profession.

THE PROBLEM OF VALUATION

It is quite impossible to deal with the historical cost vs. fair value question in a few minutes, but some comment appears to be in order. I suppose students today are tired of hearing from the few of us who observed the business world in the 1920s and 1930s. Some of these (one writer must have had these old eyewitnesses in mind) are no longer at the SEC. In the words of another leading accountant, these roadblocks to progress have been removed! One practice noted by these people was

[4] James M. Landis, "Interpretations of Rules for Listing and Issuance of Securities," *The New York Certified Public Accountant,* Vol. 5, No. 2 (January 1935), p. 23.

that appraisals of assets were in vogue for companies selling senior securities in the 1920s.

At one professional meeting in this period, students of A. C. Littleton participated in a discussion in which the key question seemed to be whether the appraisal increment (always up in those days) was capital or deferred income to be offset against depreciation on the written up values or transferred to earned surplus as the depressed income figures were transferred to that account. Keeping income up was popular. Only two references need to be made to the 1930s. A newspaper headline of the day reads, "Assets of $19,301,044 to be Valued at $1 in U.S. Industrial Alcohol's Proposed Set-Up." The president of the company explained to the stockholders that "in view of the impossibility of arriving at even an approximate valuation of plants under existing conditions, it is felt that an understatement of such values is the conservative course." The second example is from the *New York Times* of Thursday, October 20, 1932. The headline writer told the story:

UNITED FRUIT TO CUT VALUES $50,945,000

Surplus And A Reserve Will Be Reduced By Change In Property Totals On Books

ASSETS ARE NOT ALTERED

Readjustment Expected To Affect Profits Favorably For Year To Extent Of $4,889,000

American Seal-Kap Corp. had the problem in reverse when it took over United Fruit in a purchase transaction nearly forty years later.

The December, 1931, issue of *The Accounting Review* contains articles on "The Accountant and Changing Monetary Values" by William B. Castenholz and "Is Appreciation Profit?" by Fritz Schmidt. Castenholz says H. W. Sweeney's stand on the subject harmonizes with his. Schmidt's closing paragraph is a warning that some would issue today but others could not accept:

"According to the present position of business knowledge reflected in the literature, it would seem easy for the majority of authorities to agree upon

the principle: Appreciation is not Profit. No one actually uses the rule: Appreciation is Profit! It is necessary to come to some decision if business administration is not to have the reputation of being less concerned about fundamental matters than about individual technical details."

The editorial in this issue is entitled "Dispraise of Appreciation," edited by Eric L. Kohler.

STUDIES IN PROGRESS

It is too early to predict the results which might be expected of two major efforts to examine the present state of financial reporting, but some reference to the work of two study groups established by the American Institute of Certified Public Accountants early last year seems to be required. One was a seven-man group, headed by former SEC Commissioner Francis M. Wheat, appointed to make a study of how accounting principles should be established. It issued its directive (called a prospectus) on March 29, 1971, to report its conclusions to the board of directors as soon as possible. After a thorough study of memoranda, other printed material, and the record of a public hearing, the group delivered its conclusions and they were published on March 29, 1972, under the title, "Establishing Financial Accounting Standards." Briefly the report recommends the creation of three groups. First, a Financial Accounting Foundation, independent of all existing professional bodies, would be established. It would be a fund-raising body and would appoint the members of the second group — a Financial Accounting Standards Board, which would devote full time at full pay, supported by a Financial Accounting Standards Advisory Council, whose members would work as advisors to the board without pay. This organization would replace the present Accounting Principles Board which was recommended in 1958 by the special committee on research program whose chairman was Weldon Powell. Another member was Robert K. Mautz of the University of Illinois at Urbana-Champaign. Two other Illinois graduates — contemporaries of Weldon — were on this committee which brought in a unanimous report, as the current committee has done. Thus, the recommendation of the study group, after considering and rejecting proposals to turn the task over to a governmental agency, is that the establishment of financial accounting standards should remain in private hands.

One other comment may be appropriate at this time. The group has recommended that the label "financial accounting standards" replace "accounting principles." The special committee struggled with

terminology, postulates, general principles, and practices. Ten years before the committee was created the American Accounting Association made a change in title. The 1936 and 1941 titles of its statements used "accounting principles," but the 1948 revision carried the title, *Accounting Concepts and Standards Underlying Corporate Financial Statements.*

The concluding comment in this revision is most interesting in light of the problems we face today:

> If accounting standards are to merit acceptance, financial statements in which they are incorporated must supply dependable information for the formulation of judgments. These judgments made in an economic setting subject to important changes can be relied upon only if such standards are adhered to consistently. Changes in accounting policy should be limited to those that will lead to improved standards.
>
> Accounting for the business activities of modern corporations will continue to offer many problems. As business structure becomes increasingly complex, the special and often diverse interests of investors, management, labor, and government will place increasing demands upon accounting and accountants. The application of accounting concepts and standards in the solution of these problems requires on the part of the accountants a high degree of integrity, competence, and social responsibility.

These paragraphs might have been written as a charge to the Accounting Objectives Study Group chaired by Robert M. Trueblood. This group was set up at the same time as the other group. The Trueblood group has a more distant reporting date, but I have sensed a feeling of compulsion on their part to get on with the job which is to suggest the direction financial reporting should go in this country. Their efforts may have a significant impact on the rest of the free world if the campaign for international harmonization of accounting standards succeeds. It is clearly too early to predict the outcome of this group's study of our accounting problems. Unless I have overlooked something, Norton Bedford's primary interests for some time have been in the Trueblood area of inquiry. It should also be noted here that he has been active in spreading the word in various parts of the world — a visible interest in international harmony in accounting.

ETHICAL STANDARDS

In addition to his interest in the technical aspects of financial reporting Robert Mautz has been absorbed in the ethical standards of the accounting profession and of businessmen. Are we seeing an erosion here? This was the subject of the conference at Seaview last Novem-

ber attended by leading members of the American Institute of Certified Public Accountants, The Financial Analysts Federation, Financial Executives Institute, and the Robert Morris Associates. Representatives of the Securities and Exchange Commission, New York Stock Exchange, the legal profession, and discussion leaders from university faculties completed the roster. The subject was debated for two days. All of these groups must be concerned with the public image (an overworked expression) of the business world and the professions associated with it.

The *Financial Executive* for April arrived as I was nearing the end of the draft of this paper. This issue contains a report of a survey by Financial Executive Institute staff members on the subject of audit services. Forty-one percent of the 4,000 member companies returned completed questionnaires. The summary of the findings showed that the answers bore a direct relation to the respondent's annual sales volume. Thirty-three percent felt that audit fees were unreasonably high, 26 percent felt there was a conflict of interest between the CPA firms' auditing and management services activities (this question plows old ground), only 10 percent of the 787 United States manufacturing companies surveyed changed CPA firms in the last three years — in virtually every case to shift from local to national firms or to consolidate all audits in one firm. Sixty-four percent feel that their company has an effective internal audit function and 30 percent have audit committees of the board of directors. This survey is not likely to go unnoticed.

I have been concerned for some time with the quality of some auditing and accounting work but at the same time disturbed at what I feel is a lack of understanding on the part of lay critics.

An analogy from another field of work sums up my concern. A quotation from the preface to *The Double-Cross System in the War of 1939-1945,* a recent publication of the Yale University Press, by J. C. Masterman, does the job in my opinion:

As objections to publication diminished, the case for publication gained in strength. I felt that if security objections were removed, there was no decisive argument against allowing people to read reliable accounts of events which had taken place. It was also right to give credit for a successful operation to those who deserved it — in this case M.I.5 and, to a lesser extent, M.I.6. This I took to be important because the general opinion of the Secret Service was low. Any good work done by the Secret Service is usually unknown except to those in high places and those personally concerned. On the other hand any error or partial failure receives a great deal of publicity and a spate

of criticism. Failures are exaggerated, successes are never mentioned. Some of the spy cases of the fifties and sixties, for example, have seriously damaged, usually unfairly, the image of the Secret Service. Although this is inevitable, it carries with it unhappy consequences, for when reputations suffer, confidence in the services is lost. As Hugh Gaitskell put it in 1961, "Secrecy may be essential but confidence must be restored."

The Accounting Profession in Mexico—And Why

RICARDO MORA, JR.*

In case you link Mexico with the idea of gun-shooting charros, expropriations and land redistribution, let me tell you that my brother-in-law owns a hacienda near Toluca, some sixty miles northwest of Mexico City. Well, this is not an entirely accurate statement; land in that area, and in the whole country, was seized by Mexico's revolutionaries during the 1910s, and then distributed, mostly in the form of ejidos (small farms). Subsequently legislation was enacted limiting the acreage to be held by any one person.

More accurately, what my brother-in-law owns is the house that he bought from the former aristocratic owner of the hacienda, and which was badly damaged by cannon shots during the revolution.

In the reconstructed library of the hacienda I recently found one of those old, genuine, bound, and thick accounting books in the real Spanish tradition inherited from the years of the Napoleonic Code, and on the last pages there is what seems to be a summary of a large number of transactions that took place during a period of time in the year 1803.

This summary statement is signed by the administrator of a mining property belonging to Don Vicente D. Guridi and his wife, Doña María Antonieta López Rayón, and the numerical information is followed by a legend worded as follows: "As may be perceived from the

* Ricardo E. Mora, Jr. is a partner of the Firm Despacho Freyssinier Morin, S.C. of Mexico City. His firm also represents Ernst & Ernst in Mexico. Mr. Mora is Contador Publico and also is a member of the Accounting Faculty of the University of Mexico City. Mr. Mora is very active in professional accounting matters and is a past president of the Instituto Mexicano de Contadores Publicos. He is a member of the International Committee on Accounting Cooperation.

preceding comparison and account, it is my debit of 2,770 pesos, 1-5/8 'reals' (meaning reals of silver, or pieces of eight), and my credit, 3,200 pesos, 2-3/4 'reals'. As may be seen, it results in my favor — and then, written in brackets, the abbreviation 'I.T.' — the amount of 432 pesos, 1-1/8 reals . . ." Later research has ascertained that the abbreviation 'I.T.' in brackets simply means I think.

The administrator, Don Francisco de Paula Rivera closes his report by stating: ". . . which account has been faithfully and legally drawn, without guile, fraud or deceit: it is certain and true, and because of this, I swear it to God our Lord, and to the Signal of the Holy Cross, and I affix my signature onto it in Real de Angangueo, this 28th of May of 1803."

This report precedes by 144 years the publication of "Tentative Statement of Auditing Standards" by the American Institute of Accountants in 1947.

Recently, the Mexican Institute of Contadores Públicos reaffirmed its invitation for the 1977 World Congress of Accountants to be held in Mexico City. In one of the opening paragraphs of the invitation, it boasts that Mexico City was already a metropolis of 60,000 in 1524, while the island of Manhattan had not yet been discovered.

With this background, one wonders why it is that Americans should not be more preoccupied with "keeping up with the Garcías" than with the Joneses.

THE CONTADOR PÚBLICO

The profession in Mexico had an unusual beginning. I do not know when the first course in accounting was seriously offered, but I do know that the first man to hold himself out as an authorized contador público graduated from a university in Mexico City in the year 1907. By the length of the studies (five years at a level which would be today comparable to high school plus preparatory school), I suspect that the curriculum could have been better described as one in bookkeeping, rather than one leading to independent practice (and I say this with the greatest respect for one of our most revered pioneers).

But the fact that the curriculum for a career in accounting was initiated by a university, and that our pioneers from the very beginning strived to be recognized as contadores públicos, not only in name, but also in capability (whatever they lacked in college education they made up with self-study, including coming in contact with the Anglo-Saxon concept of independence), established a standard that is ob-

served to this day in that contador público is a university degree, rather than a license to practice.

In my opinion, the disadvantage of this situation is that there is no examination furnished by the state for applicants of public accounting certificates. Governments of the twenty-nine states, two territories, and the Federal District of Mexico automatically issue practice licenses to people holding bachelors degrees in accounting. This is at present a degree obtained after five years of college and after writing a dissertation on a subject freely selected by the undergraduate, and, usually, after being subjected to a two-hour public confrontation with a panel composed of three or five professors who pose questions on the dissertation, a practical problem solved in advance by the candidate, and sometimes other questions based on the dialogue.

In other words, circumstances worked in such a way, that Mexico preceded most of the states in the United States in requiring a college degree of all practitioners in public accounting. This was probably a by-product of our university system, which was almost totally inspired in the old continental European tradition.

In contrast with the nature and characteristics of our European education, we shall see later that the profession in Mexico is (and was from the beginning) an adaptation of its American counterpart. So much so, that the Mexican Institute's Committees on Accounting Principles and on Auditing Procedures have been criticized for lack of originality, and for importing American practices into Mexico rather than exerting best efforts to develop "Mexican accounting" — as though there were Belgian physics, or Peruvian mathematics, or Chinese engineering principles.

Curiously enough, the criticism for our Yankee imports has come from the School of Commerce of the National University of Mexico City, where the trend, at least in some respects, seems to be American-inspired.

Among other things, in 1958 the School of Commerce finally initiated a program in business administration. In 1968 it started a master's degree program in business administration. The present contador público curriculum has a large number of courses in business. There is a proposal to change the name of the School of Commerce to School of Business, and finally (although I am afraid that our beloved pioneers will rise from their graves), elimination of the separate contador público program is being contemplated. It would be degraded to a major in business administration.

THE MEXICAN PROFESSION

The Mexican Institute of Contadores Públicos was born in 1917 around a café table; its constitution was signed by some ten to twenty public accountants. Presently it has approximately 3,500 members, but more importantly, it represents twenty-one local societies which have been joining on the basis of automatic membership since the institute became the national organization in 1965.

Among other things, the institute founded in Mexico City was chosen as the one to carry the national torch, probably because it had shown signs of unselfishness and a working spirit at a time when it was more of a club — where one would join more for the prestige than for any practical advantage.

The Mexican Institute appointed its first Committee on Auditing Procedure in 1955, and since then has produced thirty-two bulletins. If we were to really copy the Americans, the next step would now be for us to come out with Bulletin 33 as a codification of the other thirty-two — but this would bring about a decrease in demand for the first thirty-two bulletins (which sell well in Spanish-speaking Latin American countries), and I am told that we still have a large stock of those thirty-two bulletins on the institute's shelves.

The Mexican Committee's bulletins ruled on negative opinions resulting from the examination of financial statements not in conformity with accepted accounting principles at a time, I believe, the American pronouncements permitted denial of opinion, instead of obligating the practitioner to state that the statements did not present fairly financial position and results of operation.

Also, last year the Mexican Committee issued a bulletin describing the public accountant's professional opinions different from reports on financial statements where, in addition to regulating the expression of opinions on supplementary and analytical information (such as a statement on costs of production, or an analysis of accounts receivable), it permits expression of opinions on forecasts and financial projections.

I understand that the American Committee on Auditing Procedure is at this time debating whether it wants to come out with a pronouncement on forecasts, especially now that their British cousins have turned the table and taken a more revolutionary position in this area (and in others, such as management services).

To a list of questions posed by the American paper on forecasts, the Mexican bulletin would reply as follows: Are forecasts predictions or are they financial projections? They are financial projections as

long as they are prepared under the generally accepted accounting principles that would have been applicable had the forecast information been of a historical character, and as long as their application is consistent.

Does association with a financial projection impugn the CPA's independence? It does not impugn his independence any more than management services do.

Should reporting to the general public on forecasts be prohibited? Not at all. The whole purpose is to aid the general public in its consideration of forecasts once subjected to the good faith of an impartial examination.

If the profession does become involved, should our reporting be subject to strong restraints? The contador público should follow forecasts with the same directives as with other attest services. He should be bound by generally accepted auditing standards as applied to the specific situation, and the information subject to examination should be definable, quantifiable, and verifiable as a result of an information system whose structure permits the application of his specific expertise.

Should the CPA be required to state his position regarding assumptions? No, just as he is not required to do so in connection with contingencies disclosed in footnotes to financial statements, unless he has strong reason to believe that such contingencies are not fairly disclosed.

Should a CPA be permitted to state that he has prepared the forecast? In general, the Mexican position is that the attest function should not be extended to information prepared by the contador público himself, and that every precaution should be taken in the wording of the respective document so as not to give an impression that it constitutes a report.

Should there be time limits on periods covered? This question has not been answered by the Mexican Committee.

MEXICAN AUDIT REPORTS

Generally accepted Mexican auditing standards are almost identical to those in the United States, and, as a result, you would normally find the standard short-form report on audited financial statements — except that very frequently it would be composed of three paragraphs. The third paragraph was born in 1959 as a result of legislation making it possible for federal income taxpayers to submit their independent accountants' report on financial statements as support of their com-

pliance with federal tax obligations, as long as other supplementary information is submitted by the taxpayer, and as long as the accountant issues his opinion on his client's compliance with tax obligations. This, the accountant does in a third paragraph following the other two dealing with the audited statements.

Aside from this, Mexican auditing is very similar to the practice in the United States. We have obligatory confirmation of receivables and observation of physical inventories. Scope limitations, when material, will culminate in abstention of opinions; exceptions to the opinion, when material, will culminate in negative reports.

One area where unofficially we feel that the American profession has not been fair to its clients is in regard to the "subject to" opinions. In Mexico it is said that in compliance with generally accepted accounting principles, disclosure should be made by the client of important contingencies. But why should the public accountant rub it in by qualifying his report when such contingencies exist? Contingencies are not his client's fault, and even if they were, their outcome is not within the power of the client.

The "subject to" phrase may cloud the clarity of the report on the financial position, but it does not harm the financial statements that make full disclosure. After all, the accountant is reporting on fairness of presentation of financial statements, and not on the impeccability of financial position.

This, a highly technical subtlety, strongly contrasts with unfortunate bits of legislation that are still in force requiring publication of certified balance sheets.

Even though not half as stringent as the United States, Mexico does have its own SEC, which requires registration of companies listed or unlisted in a stock exchange that are contemplating public issues of capital shares or debentures. These companies are obligated to publish annually their certified balance sheet, and, unfortunately, many of them tend to follow that requirement literally: they publish the balance sheet with the report on the contador público at the bottom, but they forget the other basic financial statements and, in some cases, they even leave the footnotes out!

Some very old laws (for instance, acts governing issuance of mortgage bonds) require publication of the certified balance sheet not only in the Official Federal Gazette, as in most other cases, but also in a "daily newspaper of wide circulation." How is that for free advertisement of the certifying contador público (without violating his ethics)?

The typical tourist literature on Mexico describes a land of contrasts: the very old Aztec pyramids and the very new and daring architecture of our University City and housing complexes. This, I am afraid, is also descriptive of our profession.

We have pronouncements that make the statement of changes in financial position (sources and allocation of funds) a basic statement, subject to examination and reporting on by contadores públicos; we have directives on the "letter" on internal control, making it obligatory, both to provide a more complete service to the client, and for the auditor to be able to prove compliance with the respective generally accepted auditing standard; we have rules on using the work of other auditors. And yet, as recently as 1971, we had an amendment to banking law whereby members of the board of directors are obligated to review monthly financial statements, which are published in the official gazette and commercial newspapers, with the responsibility of "approving and reporting — in that order — on the authenticity and the exactness" of the data which must "effectively disclose the true financial position."

We have a bulletin on statistical sampling, and at the same time we still have to live with that very old character of French law that has been translated as examiner for shareholders or statutory auditor: in Spanish comisario (and let me hasten to say that this does not translate as komissar). His functions are to report to the shareholders of every Mexican corporation on the reliability of financial statements, and "to inspect, at least once every month, the books and files of the corporation, as well as its cash on hand." Obviously, this is seldom, if ever, complied with.

ACCOUNTING PRINCIPLES

Mexico has a Committee on Accounting Principles which was established in 1963, but which started putting out its recommendations only in 1969. Still, in that short period of time, it has published nine bulletins of which number one is presumptuously called "The Basic Theoretical Structure of Financial Statements," and of which at least two bulletins are highly controversial.

1. Revaluation of fixed tangible assets by means of technical appraisals is permissible under generally accepted accounting principles. Here, not only the possibility of departing from historical cost and substituting appraisals, but also the implication in several paragraphs

of the pronouncement that this has been the practice in Mexico for several years, certainly came as a surprise to many.

2. The method of direct or marginal costing is a generally accepted method of pricing inventory for the purpose of measuring cost in the cost or market rule.

We have a bulletin on consolidated financial statements, including the so-called equity method for long-term investments, although this has not been applied very widely so far.

We have the concept of deferred income tax (and deferred compulsory profit sharing to personnel which is a participation to the employees in after-tax income). And at the same time you would seldom find companies that would use the financial or decreasing method of amortizing bond discount and issuance expense, as Mexican tax legislation absurdly requires that this amortization be made "in proportion to bonds retired every year."

You would find a modern treatment of leases where they in effect represent installment purchases by lessees, and at the same time you would more often than not find straight-line amortization of interest included in notes receivable and payable, rather than the financial or decreasing method for taking interest to operations.

The pronouncements of the Mexican Committee on Accounting Principles are all presently in an exposure stage, but during this year the pronouncements will begin to become effective.

One advantage in our not following the American Institute of CPAs too closely, is that now we are probably in a position to bypass the need of appointing an Accounting Principles Board. From the present Mexican Committee on Accounting Principles, we may want to leapfrog to the recently proposed Financial Accounting Foundation which, according to the recommendations of the Study Group of the American Institute of Certified Public Accountants, is to operate a full-time, seven-member Financial Accounting Standards Board in substitution of the present practitioners' accounting principles board.

Problems of Uniform Accounting Principles in Poland

ALICJA A. JARUGA*

A recent international development has been the increasing involvement of governments and other social organizations with business enterprises and other activities, such as education, health, and other public services. To attempt to meet these new managerial demands, governmental units require additional information to permit optimal resource allocation, to create and allocate the national product, etc.

To meet these rising governmental and public demands for expanded enterprise information effectively, appropriate rules and uniform principles of accounting have become necessary in much the same way such accounting rules and principles have assisted the enterprise sector of various economies.

The need for this information has been recognized in Poland, particularly since 1945. In this period the socioeconomic system of Poland has been based on the socialization of the means of production, trade, communication, banks, and large scale agriculture. The country's development, thus, has been based on a planned economy. The fact that a major part of the economy has been socialized and that this sector

* Alicja A. Jaruga is professor of accountancy of the University of Lodz, Poland. Her doctoral and habilitation degrees were completed at that same university. Professor Jaruga is the head of post graduate studies in business management at the University of Lodz and has been a visiting professor at Moscow State University and a visiting scholar under the terms of the Ford Foundation Fellowship during the 1971-72 academic year at the University of Illinois. She is a CPA and has held many offices in Polish professional accounting societies. She has published four books as well as many articles. Her special interest has been in the area of cost and management accounting.

generates approximately 80 percent of the total national income[1] has identified the need to program, budget, plan, and control the allocation and use of nationalized resources.

Uniform accounting principles have been developed in Poland to meet the demands of planning and managing a national economy. These principles include: (1) a uniform accounting plan; (2) uniform financial (external) reports; and (3) uniform principles of asset valuation.

The first Uniform Accounting Plan was introduced in Poland in 1946 for industrial and trade enterprises. Additional reforms occurred in 1949 and 1952. The current Uniform Accounting Plan has existed since 1960.[2]

The latest improvements in the national economic planning and management system of Poland require additional changes in uniform accounting principles and financial reports. The changing and rising demand for accounting data on the one hand and an expectation of a wide application of computers on the other hand have been considered in the proposed national Uniform Accounting Plan.[3]

An analysis of the current uniform accounting principles indicates existing problems and emerging needs. It is presently believed that the Uniform Accounting Plan will be introduced in 1974 or shortly thereafter.

THE SCOPE OF THE UNIFORM ACCOUNTS

The Uniform Accounting Plan of 1960 attempted to utilize minimum uniform accounting principles for socialized enterprises only; other enterprises utilized a different system. Under this plan the firms were allowed to devise accounting systems to meet their individual needs. The plans, however, were largely derived from plans and systems created at a higher level of the governmental hierarchy. The accounting plan systems used in Poland (in descending order) are:

1. Uniform Account Plan (the highest level of aggregation and general principles)

[1] National Income produced in 1969 in Poland (percentage)

Socialized economy		80.1	
of which: State economy	70.9		
Co-operative economy	8.8		
Non-socialized sector		19.9	100.0%

(Concise Statistical Yearbook of Poland, C.S.O. 1971, t. 5, p. 61)

[2] See appendix A-1.

[3] See appendix A-2.

2. Branches Accounting Plans
3. Firms Accounting Plans

The Uniform Account Plan was established by the Ministry of Finance; it serves as a base for creating Branch Accounting Plans. The Uniform Account Plan consists of a chart of artificial accounts, a description of the functions of each account, and principles for creating analytical (subsidiary) accounts, and so-called corresponding accounts necessary to complete the system and compile data in the required manner for macrolevel reporting needs.

To facilitate the further development of the Branch Accounting Plans, the Ministry of Finance has published as a directive describing typical account plans for industry, construction, trade, and transportation groups. These plans are especially useful in describing those groups of accounts not requiring differentiation for different branches of manufacturing or other typical accounts for the entire industry, such as:

0 — Fixed assets
1 — Monetary assets and credits
2 — Receivables and payables
8 — Results and funds
9 — Investments and major repairs and, for macro-accounting purposes, created group assets
4 — Cost

The particular branch problems are taken into consideration in such groups of accounts as:

5 — Cost of activities
6 — Products

and to some degree groups:

3 — Materials and merchandise
7 — Revenues and income

Typical accounting plans contain a minimum and a maximum chart of accounts; the existing flexibility, is indicated by the number of accounts:

	Manufacturing	Construction	Trade
Minimum	73	74	78
Maximum	178	169	143

The Branch Accounting Plan also contains principles of cost ac-

Table 1

Uniform Accounting Plan (U.A.P.)	→	Branch Accounting Plan (B.A.P.)	→	Firm Accounting Plan (F.A.P.)
Chart of synthetic accounts	→	Chart of synthetic accounts*	→	Chart of synthetic accounts*
Directives about analytic accounts	→	Chart of analytic accounts (Divisional accounting in particular)	→	Chart of analytic accounts
General principles of the functions of accounts	→	Detailed principles of synthetic and analytic accounts function	→	Detailed principles of synthetic and analytic accounts function
		Instructions about documents, forms, and their circulation, and directions about accounting techniques	→	Detailed instructions about: 1. Documentation forms 2. Documents circulation 3. Forms and approach used by given accounting techniques

Explanations:
* unused accounts strike
→ points on a lower organizational level of account plan

counting, all forms of required documentation and directives for the circulation of the documents, etc. The Firm Accounting Plan usually contains additional principles for internal control purposes. The interrelationships between the Uniform Account Plan, the Branch Accounting Plan, and the Firm Accounting Plan are noted in Table No. 1.[4]

Structurally the Uniform Accounting Plan contains a chart of accounts with decimal classification, consisting of forty-three required and five optional accounts. The accounts are divided into ten groups on the basis of economic relations between them.

In the Uniform Account Plan, minimum requirements for all socialized enterprises have been formulated. Small firms must use at least forty-three required accounts. Medium and large size firms can increase the number of accounts and the details of accounting according to their special needs. The Uniform Accounting Plan is feasible. The uniform way of recording transactions is limited by the requirements of external reporting which, however, are numerous. General principles of cost accounting are adapted in each branch of industry. The branch standards of cost accounting are uniform for all state enterprises belonging to that branch.

The Uniform Account Plan system guarantees that transactions are always recorded in the same classification scheme. The Uniform Account Plan also enables the preparation of financial statements of individual firms and their branch organizations. The major financial statements are:

Balance Sheet (Table 2, Table 3)
Profit and Loss Statement (Table 4)
Reports of Sales Performance (Table 5)
Reports of Production Cost Performance (There are 3 major reports)

The Balance Sheet is used to analyze the financial situation and to determine whether or not a firm follows the financial system standards. In the balance sheet assets groups correspond to appropriate groups of funds and liabilities. This correspondence is illustrated in abbreviated balance sheet in Table 2.

The first three groups (A, B, C) of balance sheets are used for the operating activities. The last group (D) is used only for separately budgeted and controlled activities of investments and major repairs.

[4] J. Doraczynski, Plan Kont (Accounting Plan). (Warszawa: M.E.R., 1971), p. 578.

Table 2

Balance Sheet*

Assets		*Liabilities*	
Operating Activities			
A. Fixed assets	4,303	A. Basic (statutory fund, usually for all net fixed assets and 60 percent usual level of inventories)	4,453
Allocation of profit	1,014	Depreciation	1,028
		Profit	1,014
Total A	5,317	Total A	6,495
B. Materials and supplies	1,945	B. Bank credits for inventories	633
Work in process	313		
Finished products	660		
Prepaid cost	49		
Total B	2,967	Total B	633
C. Cash	3	C. Bank credit for receivables from sales	364
Cash allocated to special purposes	605	Overdue debts (bank credits only)	302
Accounts receivable from sales	924	Accounts payable for purchases	889
Other accounts receivable and claims	65	Other liabilities	656
		Special funds (capital allocated to special purposes)	720
Total C	1,597	Total C	2,931
Investment and Major Repairs Activity			
D. Cash for investments and major repairs	198	D. Funds for investments and major repairs	1,192
Investments in progress	44	Bank credits	. . .
Investments completed	1,118	Accounts payable for investments and major repairs	116
Major repairs in progress	. . .		
Major repairs completed	126		
Total D	1,486	Total D	1,308
Total (A+B+C+D)	11,367	Total (A+B+C+D)	11,367

* Abbreviated and simplified quarterly balance sheet used in Poland to the end of 1971.

Recently, as a result of an increase in economic decentralization in Poland, many financial rules were changed. The major changes were concerned with investments and repairs. Prior to this change, almost all large investments stemmed from long-run central planning decisions and the funds necessary to make the investments were closely controlled. Presently the firms are much more involved in investment decisions and are directly responsible for the results of investments.

The accounting changes necessitated by the change in the level on which investments decisions are made are shown by comparing the structure of the balance sheet used in 1972 (Table 3) and the balance sheet used in 1971 (Table 2). Greater flexibility in the bank credit system is also revealed in these balance sheets. Rather than several different credit sources or transactions for inventories, receivables, etc., only one credit source is now needed for the current needs of operating activity.

As it is illustrated in Table 2 and Table 3, funds, credits, and other liabilities are grouped according to their allocation. The assets are grouped according to their financial sources with breakdowns by economic properties. In the 1972 balance sheet (Table 3), each group of assets closely corresponds to the appropriate group of liabilities. This facilitates the analysis of the use of funds and credits.

In Poland there are also uniform principles of assets valuation. Generally speaking, the historical cost basis is used.[5] The value of fixed (long-term) assets, however, is changed periodically every seven to ten years to the level of replacement cost (so-called physical reproduction) by government regulations and a new index of prices. The prices of current goods are usually fixed for a long time and some periodical changes are decreed government regulations too. Because of these procedures, the value of assets is approximately the same as replacement cost. In some cases realizable value is used for asset valuation if it is less than cost.

The Profit and Loss Statement reports information on net profits and losses from normal activities and unusual events, such as penalties, payable and receivable, and waste (Table 4). To analyze income performance, the Report of Sales Performance and the Report of Production Cost Performance are used.

[5] Wycens bilansowa (Balance Valuation) (Warszawa: M.E.R.), pp. 885-93; and Monitor Polski nr 69, 1967.

Table 3

Balance Sheet*
on the end of any quarter

Assets	*Liabilities*
A. 1. Fixed and intangible assets	A. 1. Funds allocated to fixed assets and depreciation
2. Investments (construction in program) and major repairs	2. Funds, bank credits, and payables for investments and major repairs
Total A	Total A
B. 1. Distribution of profit	B. 1. Profit (current year)
2. Loss	2. Subsidies from government
Total B	Total B
C. Inventories and receivables from sales and services	C. Funds in current assets, bank credits, and short time payables
1. Participation in other enterprises	1. Sources of current funds
2. Materials and supplies	2. Bank credits (major and other current credits)
3. Merchandise and article of consumption	3. Payables
4. Products (work in process, work finished)	
5. Other inventories and deferred cost	
6. Receivables from sales and services	
Total C	Total C
D. Other assets	D. Other liabilities
Cash	Other payables
Other receivables	Other reserves and prepaid income
Claims and receivables in litigation	Funds for special purposes
Cash allocated to special purposes	
Total D	Total D
Total (A+B+C+D)	Total (A+B+C+D)

* Abbreviated and simplified quarterly balance sheet used in 1972 in Poland.

The Report of Sales Performance discloses information on cost and revenues, and gross profit distribution (Table 5). Budget and performance data make possible an analysis of the major factors determining income.

Some modifications in financial statements are planned according to the projection of uniform micro- and macroaccounting data.

Table 4

(in thousands)

PROFIT AND LOSS STATEMENT*

Specification	Plan	Loss	Profit
1. Results (profit or loss) of manufacturers' domestic sales			
2. Results (profit or loss) of manufacturers' export sales			
3. Results (profit or loss) of distributors' domestic sales			
4. Results (profit or loss) of distributors' export sales			
5. Total profit and loss from sales (1 to 4)			
6. Nonoperating and other profits and losses from domestic activities**			
7. Nonoperating and other profits and losses from nondomestic activities			
8. Nonoperating profits and losses from investments and major repairs activities			
End result (net profit or net loss 5 to 8)			

* Condensed version of quarterly profit and loss account.

** I.e. Losses from disposal of current assets, penalties, expenses of the previous year, bank interest income and expense for overdue debts.

Table 5

Quarterly Report from Sales Performance*

I. Manufacturers' domestic sales		Plan	Performance
1. Revenues from sales			
2. Cost of goods sold			
3. Accumulation from sale (gross profit 1-2)			
4. Turnover tax (sales tax charged to income)			
5. Variances paid to government for sales above standard sale prices			
6. Government subsidies for sales under standard sale prices			
7. Government subsidies for nonprofit goods***			
8. Results from**	Profit (+)		
9. Sales (3-4-5+6+7)	Loss (−)		

* Condensed.

** The result (profit) after so-called profit equalization.

*** Nonprofit goods can be: books, medicines, children's wearing apparel.

PRESENT INFLUENCES ON THE APPLICATION OF THE UNIFORM PLAN

In the development of the theory and the practice of macroaccounting, several new planning and financial system regulations and a trend to wider computer use are the major factors underlying the preparation of a new Uniform Accounting Plan in Poland.

The new Uniform Accounting Plan will deal with the unification of accounting principles for all profit and non-profit units in the national economy. It will take into consideration a new classification of the national economy in order to aggregate relevant uniform data for planning, recording, and external reporting (see appropriate classification of activities in Table 6).

Progress in planning and managing requires accounting information for macropurposes, such as information describing the rise and structure of gross and net national income, the distribution of net national income, the data relating to the physical and financial interrelationships in the national economy, and the control figures verification of intrabranch flows.[6] For these purposes the proposed Uniform Accounting Plan (see Table A2) presumes an appropriate classification of cost and loss accounts into simple cost elements.

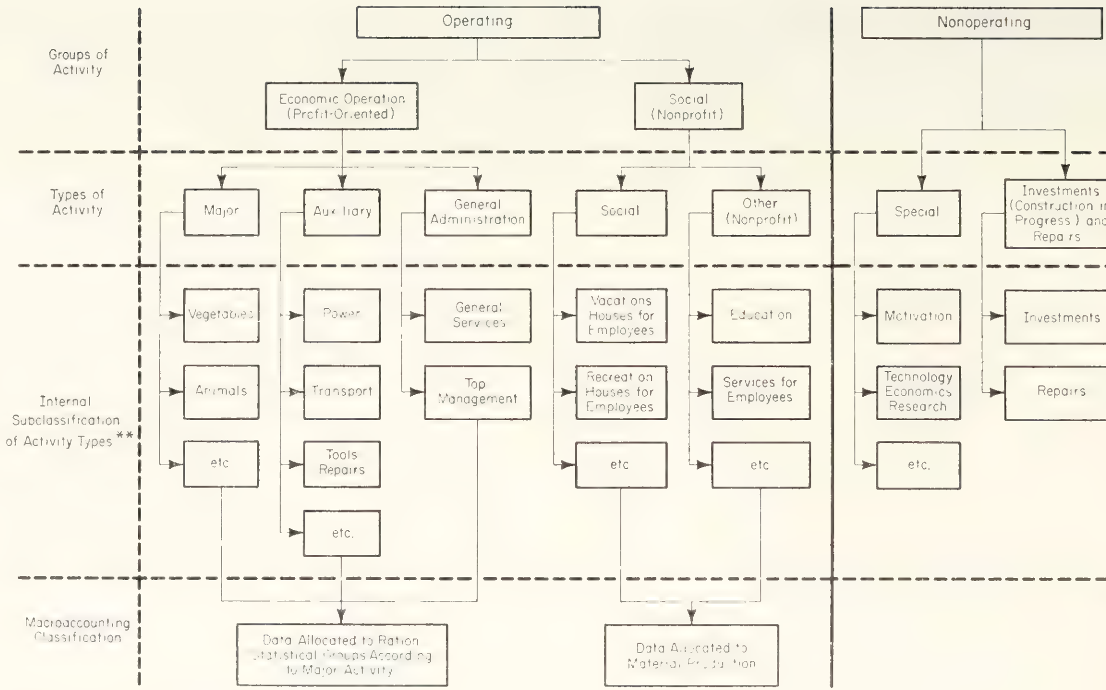
It is possible to aggregate the primary cost elements across all branches of the national economy. Group 4 accounts have been known since Schmalenbach's first uniform plan of accounting (Kostenarten), but they were used only for microaccounting. According to these purposes, several elements of cost were divided into direct and indirect items. For approximately twenty years (since 1952), Group 4 accounts have not been used in microaccounting in Poland. Now Group 4 accounts will be introduced again but in order to meet macroaccounting needs. The flow of expense and income data will create two accounting circles: an external circle closed by an income account for microaccounting purposes, and an internal autonomous circle for cost and income accounting to meet the individual needs of the firms and their branch organizations. Thanks to this, an autonomy and a flexibility will be possible in creating the particular branch and firms accounting standards. An example of this approach is illustrated in Table 7.

A special classification of purchasing (input) and sales (output) will also be required for microaccounting purposes. With the use of computers more of the external circle's data will be available to firms in the future.

---

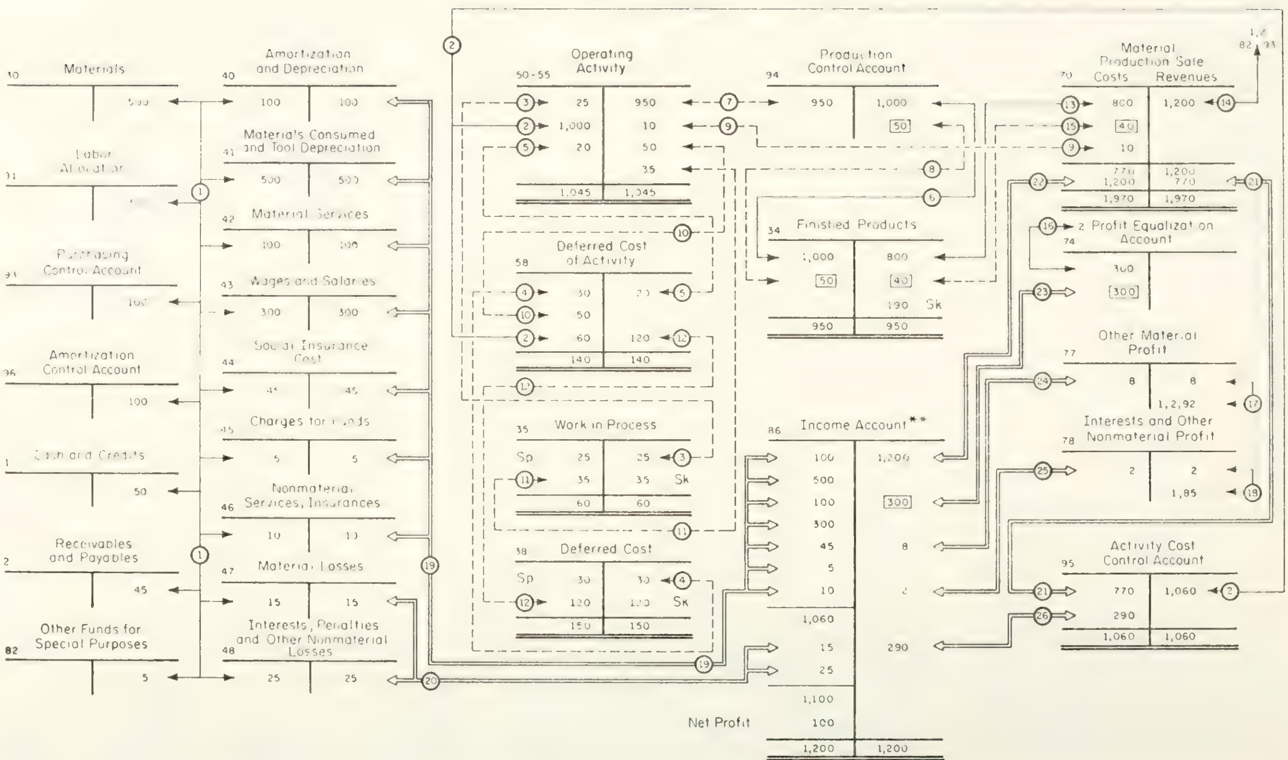
[6] See research done by T. Peche, Rachunkowosi Spoliczna (Social Accounting) (Warscawa: PWE, 1965); Z. Paryzinski, Reforme planowhont (The Reform of Accounting Plans), "Rachunkowosc" (Accounting) ur 8, 1970.

Table 6*



* See Y. Doraczynski, op. cit., p. 278.
** For example, in agriculture.

Table 7*



* From Y. Doraczynski, "Rachunkowosc" (Accounting) No. 8, 1970.

** Income account with "input" and "output" for macroaccounting purposes.

The authors of the proposed Uniform Accounting Plan intend it to contain minimum requirement for all enterprises and non-profit units in the national economy. They intend to specify the basic principles of accounting in order to assure the flexibility and durability of the Uniform Accounting Plan.

The proposed Uniform Accounting Plan was presented for discussion to all accountants in Poland. The discussion has been continuing for more than a year. Approximately 300,000 accountants and more than 5,000 Certified Accounting Experts were invited to express their opinions and proposals. *The Accounting,* the journal of the Accountant Association of Poland (founded 1908), has published several articles concerning the shape of accounting in the future. Warsaw University and the Institute of Planning and Statistics are continuing basic research in microaccounting and national statistics.

It is still too early to evaluate the planned reforms in the Uniform Accounting Plan. Only a first description of the Polish experiences and some aspects of the Uniform Accounting Plan system in a planned economy in Poland has been attempted in this article.

UNIFORM CHART OF ACCOUNTS IN POLAND

(since January 1, 1960)*

Group 0 — Long-Term (Fixed) Assets

00 Fixed assets (building, machinery, equipment, etc.)
01 Accumulated depreciation (and accumulated reserves for major repairs)
05 Intangible and noncurrent assets
09 Statistical accounts not contained in the double entry accounts, S.A.

Group 1 — Cash

10 Cash on hand
11 Cash in bank
13 Other monetary assets
15 Credits for operation activities
19 S.A. = Statistical Accounts

Group 2 — Receivables and Payables

20 Unbilled sales
21 Receivables for sales (settled up by bank)
22 Payables for purchases (settled by bank)
23 Other payables for purchases and receivables for sales
25 Wages and salaries payables
26 Other receivables and payables

* Published in *Mala Ecyklopedia Rachunkowosci,* PWE 1971, p. 320.

27 Defects, damages or gains
28 Questionable claims (receivables in litigation)
29 S.A.

Group 3 — Materials and Merchandise

30 Purchasing control account
31 Materials
32 Merchandise and articles of consumption
33 Livestock
35 Perishable tools in use
36 Depreciation of perishable tools
37 Purchasing cost (transportation, etc.)
38 Materials and merchandise price variances
39 S.A.

Group 4 — Costs

40 Debits to costs accounts (optional**)
41 Credits to costs accounts (optional**)
45 Deferred and prepaid cost

Group 5 — Costs Allocated to Activities

50 Major activity
53 Auxiliary activity
55 Overhead cost (administrative and general marketing cost)
56 Other activities (social, etc.)
59 S.A.

Group 6 — Finished Products (Inventories)

60 Products (inventories)
68 Products (inventories)
69 S.A.

Group 7 — Revenues

70 Selling expenses (transportation, etc.)
75 Revenues from sales
79 S.A.

Group 8 — Operating Results and Funds

80 Net losses and profits (from all activities)
83 Payments toward government and charges for special purposes funds
85 Statutory fund (similar to entity capital and long-term liabilities)
86 Detached assets and funds
87 Funds for special purposes
88 Reserves and prepaid income
89 S.A.

** Costs under natural classification are aggregated for macroaccounting purposes.

Group 9 — Investments and Major Repairs

90 Cash allocated for investments and major repairs
91 Credits for investments and major repairs
92 Payables for investments and major repairs
93 Materials for investments and major repairs
95 Investments in progress
96 Major repairs in progress
98 Public funds available for specific investments
99 S.A.

PROPOSED UNIFORM CHART OF ACCOUNTS*

(date of effectiveness approx. 1974)

Group 0 — Fixed Assets, Investments, and Tools

00 Fixed assets (buildings, machinery etc.)
01 Accumulated depreciation
03 Investments and major repairs (in progress)
04 Domestic contributions (government)
05 Foreign contributions
06 Other intangible assets
07 Perishable tools in use
08 Depreciation of perishable tools
09 Appropriated for statistical accounts (ASA, hereafter)

Group 1 — Cash and Credits

10 Domestic currency
11 Foreign currency and precious metals
12 Bank accounts and government credits for operating activities (D.A.)
13 Bank accounts and government credits for investment and major repair activities (I.R.)
14 Savings bank accounts and credits
15 Foreign currency bank accounts and credits
16 Foreign currency bank accounts and credits maintained abroad
17 Other monetary assets
19 ASA

Group 2 — Receivables, Payables, and Allowances for Bad Debts

20 Domestic receivables and payables (O.A.)
21 Foreign receivables and payables (O.A.)
22 Government (budget) receivables and payables
23 Receivables and payables for investments and major repairs (I.R.)
24 Employees receivables and payables
25 Other domestic receivables and payables
26 Other foreign receivables and payables

* Published in "Rachunkowosc" No. 8, 1970, Warszawa, pp. 287-88.

27 Domestic receivables litigations
28 Foreign receivables and payables litigations
29 ASA

Group 3 — Inventories

30 Materials (O.A.)
31 Livestock
32 Merchandise
33 Inventories for investments and major repairs (I.R.)
34 Finished products
35 Work in process
38 Deferred and prepaid cost
39 ASA

Group 4 — Cost and Losses**

40 Depreciation and amortization
41 Materials consumption and perishable tools depreciation
42 "Material" services (transportation, repairs, etc.)
43 Wages and salaries
44 Social insurance cost
45 Charges for special purposes funds
46 Charges for "nonmaterial" services, taxes, and insurances (excluding turnover tax which is charged to income)
47 Material losses (i.e. loss of goods)
48 Interests, penalties, and other financial losses ("nonmaterial")
49 ASA

Group 5 — Cost Allocated to Activities

50-52 Major activity
53 Auxiliary activity
55 Managerial and administrative activities
56 Social services activity
57 Other nonprofit organizations activities
58 Deferred and prepaid cost of activities
59 ASA

Group 6 — Government Contribution and Charges

61 Budgeted cash inflows
62 Budgeted cash expenses
66 Budgeted cash received
67 Budgeted cash expended
68 Budgeted surplus
69 ASA

Group 7 — Revenues and Income

70 Sales revenues from "material" production
71 Sales Revenues from "nonmaterial" services

** "Input" classified for purposes of macroaccounting.

72 Sales revenues from merchandise
73 Financial and insurance income
74 Profit equalization account
75 Budgeted revenues from taxes, donations, and payments (government only)
76 Other income
77 Net profit from "material" production
78 Net financial profits, interest, penalties
79 ASA

Group 8 — Funds and Operating Results

80 Basic funds (similar to equity and net working capital)
81 Employees motivation funds and funds for social purposes (similar to bonus fund)
82 Other funds for special purposes
83 Investments and major repair funds
84 Reserves
85 Prepaid income
86 Result (net profit or loss) of activities
87 Allocation of results (profit)
88 Government subsidies
89 ASA

Group 9 — Control Accounts

90 Transferred assets
91 Allocation of labor earnings to various funds (wages, incentives)
92 Control account for defects, damages, and surpluses
93 Purchasing control account
94 Production control account
95 Activities cost control account
96 Amortization control account
98 Control account for adjustment assets valuation (limited by government regulations)
99 ASA

Development and Present State of Cost Theory in Germany

HANNS-MARTIN SCHOENFELD*

BACKGROUND AND PURPOSE OF ANALYSIS

The approach to business problems of Europeans, and the Germans in particular, has been much more theoretical, i.e., much closer to microeconomic theory, than the pragmatic approach widely used in the United States. The difference in emphasis has led to developments in business administration that are also reflected in accounting, particularly in cost and managerial accounting. It is regrettable that despite its merits the European approach has been largely neglected in the United States. This certainly is not true for the flow of ideas in the opposite direction. It, therefore, is not surprising to find that certain developments in the United States and research findings of United States scholars have strongly influenced theory formation in Europe.

If United States studies have influenced German development of theory the question may be raised whether there is a special need for

* Hanns-Martin Schoenfeld is a professor of accountancy and business administration at the University of Illinois at Urbana-Champaign. He received his first doctoral degree from the University of Hamburg and the second one (Habilitation) from the University of Braunschweig. He has taught and worked in public and industrial accounting and as a consultant in Germany and several Western European countries before coming to the United States in 1962. He has served as a visiting lecturer at many European universities and executive development centers. Professor Schoenfeld has published several books, among others *Kostenrechnung, Rechnungswesen, Die Fuehrungsausbildung im betrieblichen Funktionsgefuege,* and is the author of numerous articles in American and German periodicals. Currently he is a member of the American Accounting Association Committee on International Accounting.

an analysis as such, aside from a general need of comparative studies. As will be shown, however, such analysis might help both to stimulate further development and to avoid duplication of scholarly effort. Particularly today, when management accounting is called upon to provide an increasingly more sophisticated input into the management decision process, it seems inexcusable to ignore any existing theoretical and practical developments. A study of cost theory[1] might even provide the basis for a change in the direction of managerial accounting — at least this presently appears to be one of the few avenues that offer some promise. This new direction seems desirable because of the development of an increasingly large number of techniques that — although showing immediate merits of their own — can hardly be regarded as fundamental for new insights and research results.

With this purpose in mind, we shall try to analyze briefly the background of the German development, though space and time limitations unfortunately make it impossible to deal with all facets.[2]

COST THEORY BASED ON PRODUCTION FUNCTION OF TYPE A

Business Administration Approach

Early, somewhat fragmented attempts to analyze cost behavior can be traced to Italy in the seventeenth century (Serra in 1613), but such attempts became more common only about 1800, e.g., Leuchs[3] in 1804 distinguished between cost that can be expressed as a percentage of the purchase price and costs that depend on time. This led directly to the notion of the break-even point analysis, which permeated the literature before 1900.

The first scholar to develop a deductive descriptive cost theory was Schmalenbach.[4] In his early publications (1899), he recognized fixed cost and distinguished between fixed cost of machinery and equipment, and fixed cost of organization. On another level he classified fixed cost into fixed cost of idleness (Kosten der toten Betriebsbereitschaft) and fixed cost of operating readiness (Kosten der lebendigen Betriebsbereit-

[1] "Costs" in European accounting theory are defined as a purposeful consumption or sacrifice of scarce resources to generate output expressed in monetary terms.

[2] For a more detailed treatment in English, see H. M. Schoenfeld, *Cost Terminology and Cost Theory* (Urbana, Illinois: Center for International Education and Research in Accounting — Monograph 8).

[3] J. M. Leuchs, *System des Handels* (Nürnberg, 1804).

[4] E. Schmalenbach, "Die Buchführung und Kalkulation im Fabrikgeschäft," *Deutsche Metallzeitung*, Vol. 18, 1899, p. 7.

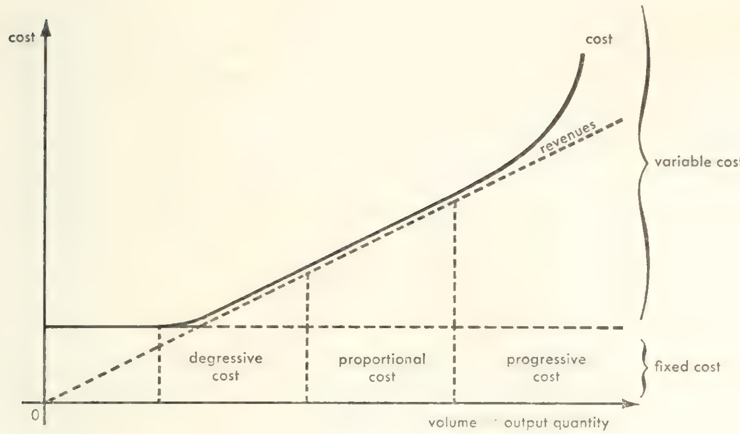


Figure 1

schaft). He also observed that these costs are subject to irregular changes (jumps) for certain output intervals. Unlike the prevailing economic theory of his time, however, his did not require capacity to remain unchanged in his model.

His variable costs are classified into progressive, degressive, and proportional cost. In terms of the development over time, various variable costs are dominant at different times. The resulting cost structure is shown in Figure 1. Initially, degressive costs are dominant, then there is a short output interval with exactly proportional cost and eventually progressive costs set in, caused by over exertion of available resources. Schmalenbach conceded that the problem is multidimensional and that his cost curve, therefore, would remain theoretical. He even stressed that "mathematical exactness does not exist in economic situations."[5] He recognized elsewhere — without attempting to integrate this into his theory — that output speed, lot size, and plant size may influence cost substantially.

His later decision model, in which he tried to provide management with certain rules, however, is based on a S-shaped cost curve used in the 1920s by most other scholars. He assumed this would force operations toward an optimum because if only marginal costs are used they

[5] E. Schmalenbach, *Kostenrechnung und Preispolitik,* 8th ed. (Köln: West Deutscher Verlag, 1963), p. 74.

would be higher before and after the optimal point. In addition, he suggested using transfer prices (Optimale Geltungszahl), the nature of which was difficult to define at that time, but which today can easily be classified as shadow prices.

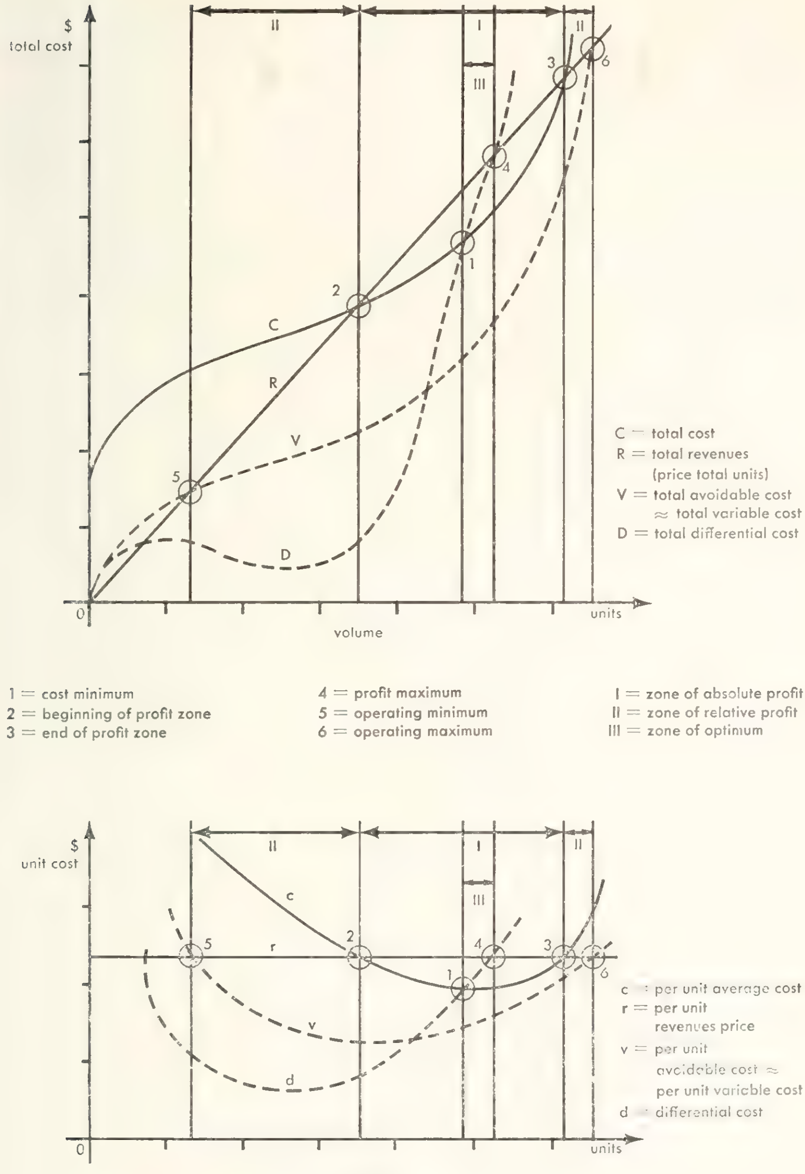
Although a remarkable step toward today's decision orientation, Schmalenbach's theory is not completely consistent because the underlying assumptions about cost behavior seem to have two different theoretical sources.

Approaches Based on Microeconomic Theory

During the 1920s the S-shaped cost curve, based on an inversion of the law of diminishing returns, became accepted as an accurate description of cost behavior in industrial operations, so accountants and business administration scholars proceeded to analyze its business policy implications. Cost behavior in all cases was explained descriptively to demonstrate the appropriateness of this cost curve. Although this theory was regarded as comprehensive and complete at the time, attempts to collect empirical evidence are difficult to find in the European literature and are of very limited range.

Mellerowicz, the main proponent of this approach, argued that the cost curve as shown in Figure 2 exists.[6] Proportionality (linearity) is presumed to exist for all direct cost while underproportional cost $(0 < \frac{\Delta \text{ cost}}{\Delta \text{ output}} < 1)$ is explained in terms of management's behavior, i.e., the elasticity of human performance is used to absorb output increases, and, only after some hesitation, management increases inputs and thus cost. Other savings are derived from economies of scales. Overproportional cost $(\frac{\Delta \text{ cost}}{\Delta \text{ output}} > 1)$ is explained again in terms of overexertion. Mellerowicz claimed that this curve is valid even for situations where capacity changes occur, because in this case initial overproportionality of variable costs is eventually supplanted by a fixed costs increase. Variable cost increases from overexertion, therefore, will fall back to normal levels or even below while economies of scale in non-process segments of the operation will also compensate for some of the added fixed costs. It is difficult, however, to imagine the simul-

[6] K. Mellerowicz, *Kosten und Kostenrechnung,* Band I, 4th ed. (Berlin: W. de Gruyter, 1963), pp. 285-398.



$
total cost
II
I
II
III
C
R
V
D
0
volume
units
C = total cost
R = total revenues
(price total units)
V = total avoidable cost
≈ total variable cost
D = total differential cost
1 = cost minimum
2 = beginning of profit zone
3 = end of profit zone
4 = profit maximum
5 = operating minimum
6 = operating maximum
I = zone of absolute profit
II = zone of relative profit
III = zone of optimum
$
unit cost
c
r
v
d
0
volume
units
c = per unit average cost
r = per unit
revenues price
v = per unit
avoidable cost ≈
per unit variable cost
d = differential cost

Figure 2

taneous presence of compensating effects of the proper size under all circumstances.

The business policy and management decision emphasis in Mellerowicz's theory is demonstrated by his identification of six so-called critical points that bear watching by management. Between these points exist zones of differing relative profitability. These ideas become self-evident from a scrutiny of Figure 2.

Mellerowicz tried to incorporate the often observed phenomenon of cost lag into his theory. He claimed that the lag affects individual cost groups as shown in Figure 3.

Major causes for these lags are:

1. legal (period required to give notice),
2. economic-social (to avoid unemployment),
3. management policy (maintain trained work force, etc.),
4. organizational (dependence of activities on each other, thus even unnecessary departments have to remain operative at a certain level), and
5. psychological (stretching of available work by employees).

The lowest cost point (optimum) occurs anywhere between 70 percent and 80 percent of technical capacity. Mellerowicz assumed, however, that changes in optimal order size, optimal number of products (mix), and optimal plant size influence output quantities and cost in addition to the cost influence by volume changes.

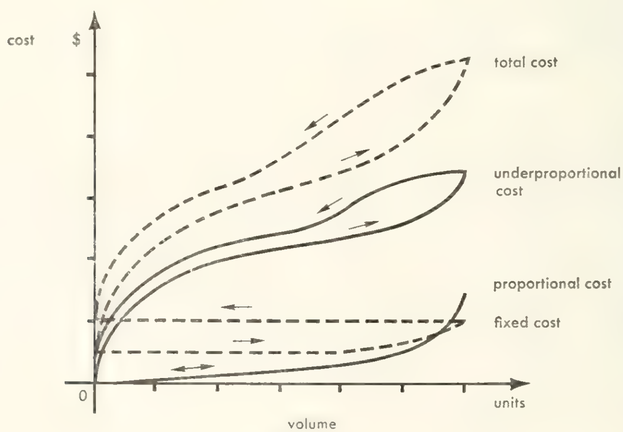


Figure 3

COST THEORY BASED ON PRODUCTION FUNCTION OF TYPE B

Importance and Limitations of Empirical Evidence

Dean,[7] Yntema,[8] and others in the late 1930s attempted to develop cost functions empirically or to validate theoretical approaches used previously; a summary of these approaches can be found in Johnston.[9] All findings apparently confirmed the existence of a strong tendency toward linear cost functions. This, however, cannot be regarded as conclusive evidence, due to the accounting data basis involved. Results may be distorted (toward linearity) because (1) some cost items are measured with implied (although not real) linearity (e.g., per unit depreciation); (2) accounting cycles — which noticeably differ from production cycles (i.e., unit time) — seem to favor equalization and therefore linearity; (3) price adjustments are necessary and often result in an involuntary smoothing of data; (4) multiple product situations are reduced to a single output measure; this requires the utilization of equivalent units which are of questionable accuracy; and (5) statistical methods used may favor linearity assumptions.

Even if, as Johnston has stated, all these factors do not necessarily introduce a linearity bias, and, if we further assume that cost behavior in the real world actually tends toward linearity, the empirical evidence is still insufficient to support predictions concerning future cost behavior. This is the case because (1) environmental conditions cannot be held absolutely constant during all observation periods; (2) whenever a negative event occurs (e.g., when inefficiencies are detected) management initiates appropriate countermeasures that sometimes change actual cost behavior; (3) many small changes in organization, work flow, etc., are taking place continuously in all actual multiproduct operations; since there is no way of eliminating all these influences — many of which are not even recorded — no uniform basis for a cost study can ever exist; and (4) the observations of actual cost are limited to a small range of output combinations and volume changes that a given operation has experienced; these are not necessarily good predictors for cost behavior in other output ranges.

From this one must conclude that empirical cost data — although

[7] J. Dean, "Statistical Determination of Cost with Special Reference to Marginal Cost," *Studies in Business Administration,* Vol. VII, No. 4 (Chicago: The University of Chicago Press, 1936).

[8] T. O. Yntema, *Steel Prices, Volume and Cost,* United States Steel Corporation Temporary National Economic Committee Papers, Vol. 2, Pittsburgh, 1940.

[9] J. Johnston, *Statistical Cost Analysis* (New York: McGraw-Hill, 1960), p. 168.

helpful tools in understanding cost behavior — are insufficient and will remain inadequate to fully understand cost functions.[10] Empirical cost curves, therefore, are too narrow a basis for future management decisions because these will be concerned largely with new situations, new technology, and new operating procedures not contained in the empirical evidence. To help management assess and understand cost behavior in situations that it has not yet experienced, theoretical cost functions still must be developed.

More recently Alchian[11] (1968) and Hirshleifer[12] (1962) — although taking somewhat different points of view — have analyzed the assumption of traditional theory that increasing marginal cost exist. Empirical studies, however, more often point toward a rather wide output range for which costs appear to be linear, i.e., a constant marginal cost development. Alchian suggests that the phenomenon output really consists of rate of output (v) and volume of output (x). Assuming that these occur within a given time period (t) he suggests that

$$v = t \cdot x$$

Output increases can be accomplished — provided t is held constant — by changing either the rate of output (production speed) or the output volume (quantity) or both. Adjustments of v tend to lead to increased marginal cost, adjustments of x to decreased marginal cost (economies of scale). Theory as well as practice usually considers both together. Our ideas concerning cost development, consequently, must be misleading as long as these two distinctly different influences are not separated.

Criticism of Traditional Cost Functions

Before modern approaches to the cost function problem are examined, the criticism of traditional cost theory has to be analyzed briefly. Since most arguments are discussed elsewhere in great detail, it suffices to summarize the major points. These are that (1) it has never been proven empirically that the inversion of the law of diminishing returns

[10] A. A. Walters, "Production and Lost Functions: An Economic Survey," *Econometrica,* Vol. 31, Nos. 1-2, Jan.-April 1963, pp. 1-66. In this the same conclusion is reached.

[11] A. Alchian, "Costs and Outputs," Moses Abramov, et. al., *The Allocation of Economic Resources: Essay in Honor of B. F. Haley* (Stanford, California: Stanford University Press, 1959), and also *RAND Corporation Paper,* 1449, September 1958.

[12] J. Hirshleifer, "The Firm's Cost Function: A Successful Reconstruction?" *The Journal of Business,* Vol. XXXV, No. 3, July 1962, pp. 235-55.

is applicable to manufacturing operations; (2) cost curves are frequently treated as if they represented a development over time (cf. Mellerowicz's critical points); there is, however, no time dimension to the traditional presentation of cost functions; (3) the alleged cost-output relationship (needed for simple analytical and decision models) does not exist, because costs depend on inputs; several different input combinations, however, may exist that permit production of the same output; this suggests the multidimensionality of the underlying relationship and the existence of various — not well-described — cost levels related to each output level; (4) cost factors are usually not substitutional,[13] i.e., they cannot replace each other. In modern industry so-called limitational processes dominate; these are machine-dependent processes whose costs are relatively stable regardless of output; (5) inputs are not homogeneous in quality; therefore, cost behavior patterns — given the same input quantity — are not completely regular; and (6) managerial efficiency and effectiveness directly influence cost; this is not reflected in any of the traditional cost curves; empirical cost curves reflect only certain possibilities (the ones actually used).

Some of these problems have already been recognized by Dean,[14] who distinguishes between segmentation, i.e., the possibility of using equipment in different modes (slower, faster, one-shift, overtime, two-shift operations) and input factor proportions, which refer to certain input factors (variable items) that can be changed directly with output changes — although not always at the same rate. From these insights Dean derived his descriptions of various cost curves that consist on the one hand of combinations of perfect, discontinuous, imperfect, and nonexisting segmentation for fixed inputs and on the other hand of changing or constant proportions for variable inputs. His approach for the first time allows a realistic assessment of cost functions in manufacturing.

Dean's analysis shows that the generalized traditional approach is inadequate and must be replaced by specific cost functions that apparently are valid only for individual cases. To develop such cost functions — which are analytic in nature — a workable hypothesis must be found to describe the underlying process in basic terms.

---

[13] E. Gutenberg, *Grundlagen der Betriebswirtschaftslehre, 1. Band: Die Produktion,* 14th ed. (Berlin: Springer Verlag, 1968), pp. 301-4.

[14] J. Dean, "Statistical Cost Functions of a Hosiery Mill," *Studies in Business Administration,* Vol. XI, No. 4 (Chicago: The University of Chicago Press, 1941).

Gutenberg's Approach to Cost Functions

Gutenberg developed the major features of his cost theory based on Dean's writings; his theory is purposely kept at a somewhat general level to permit its use as a decision guideline for most business firms.

Production Function[15]

An analysis of input characteristics of manufacturing processes reveals that the relationship

$$0 = f(r_1, r_2, r_3, \ldots, f_n)$$

where 0 designates output and r_i input factors is far too general. Most machine-controlled processes have inputs depending largely on technical specifications (z) of the equipment that usually cannot be changed without replacement for only operating speed (i.e., utilization intensity) is adaptable within certain — often rather narrow — limits. Therefore, input factor consumption (r_i) can be stated as

$$r_i = f(z_1, z_2, z_3, \ldots z_n; d)$$

or abbreviated, showing only variables

$$r_i = f(d)$$

The speed (d) in turn will be chosen according to output (X) requirements, therefore

$$d_j = \pi_j(X)$$

Since under most production plans several machines and materials are used at the same time, this expands into

$$\sum_{i=1}^{m} \sum_{j=1}^{n} r_{ij} = \sum_{i=1}^{m} \sum_{j=1}^{n} f_{ij}[\pi_{ij}(d_j)]$$

where $i = 1, 2, 3, \ldots m$ designates inputs and $j = 1, 2, 3, \ldots n$ machines. Similarly, the time (t) during which a machine is operated determines input consumption, therefore

$$r_{ij} = g_{ij}(t_j)$$

The time again is chosen according to the desired output, therefore

$$t_{ij} = \psi_j(X)$$

The double dependency of certain inputs on operating time and output can be stated

$$\sum_{i=1}^{m} \sum_{j=1}^{n} r_{ij} = \sum_{i=1}^{m} \sum_{j=1}^{n} g_{ij}[\psi_i(X)]$$

---

[15] This section is based on E. Gutenberg, Grundlagen, *op. cit.*, pp. 314-25.

Finally, there are some strictly output proportional input consumptions where

$$r_1 = f(X)$$

and a few others that remain constant regardless of output changes.

If technical consumption (production) functions, like the ones above, can be determined for each partial process, then cost projections eventually will be possible for the entire manufacturing operation.

Cost Function[18]

Before determining analytical cost functions it is necessary to identify all cost determinants, i.e., all independent variables that influence cost. The following list, though not exhaustive, is commonly found in the literature.

1. *Input factor qualities:* Quality determines the level of cost; this is very obvious if one considers skill of employees, machines and materials, etc. Management must determine minimum quality needs and maintain these, but since quality rarely can be kept absolutely stable it is to be expected that "steady continuous changes" may take place. These will result in costs oscillating about a mean. There can also be "mutative changes," however, as a result of major quality adjustments; the latter particularly should result in a decrease of cost in the long run.
2. *Factor prices:* The influence of prices on cost is usually taken as an inevitable result of market forces, but there are some cases where price levels are dependent upon usage decisions. The latter need to be incorporated into the cost function.
3. *Plant size:* As is done in traditional theory, Gutenberg assumes that there are different cost structures with changing plant sizes; some empirical evidence substantiates his view. It appears safe to assume that economies of scale in various departments together with mutative changes are designed by management to decrease quantitative (overcapacity) and qualitative (above required quality output) idleness resulting in new cost functions.
4. *Production program:* The program influence upon costs is obvious because it requires certain utilization levels, technology, quality, prices, etc.; beyond recognizing this influence, however, no specific details of general applicability are available.
5. *Factor proportion (volume):* Traditional theory has regarded this cost determinant as the major (if not only) independent variable. The

[18] This section is based on E. Gutenberg, Grundlagen, *op. cit.*, 325-44.

analysis of production functions, however, shows that there are various — arbitrary — ways in which management can adapt to volume changes, each resulting in a different cost function. The most frequent responses are (1) utilization intensity adaptation, (2) time adaptation, (3) quantitative adaptation, and (4) selective adaptation.

The utilization intensity adaptation consists of varying the speed of operation with the general cost level usually determined by the technology used. Through the adaptation of speed — within certain technical limits — some inputs (e.g., fuel, wear and tear) will be increased or decreased by proportionately larger quantities than the corresponding output change. This results in a general cost behavior as shown in Figure 4. Since a sequence of operations requires several machines we must analyze the entire bloc because improved capacity harmonies in other segments may partially compensate for some cost increases. The utilization intensity adaptation is used rarely, because of unusually excessive cost increases.

The time adaptation is the most frequent response to volume changes because it permits reduction of idleness without requiring capital expenditures. The changeover from one to two or three shifts results in increases in total cost; the tangent value of the cost curve becomes larger with each step. Once the time adaptation decision has been made, however, the average cost curve can be regarded as linear because the curve showing different costs and related output levels (Figure 5) is only a contour curve. Actual cost allocation is an averaging process.

The quantitative adaptation is chosen whenever permanent volume increases are expected and utilization intensity adaptation or time

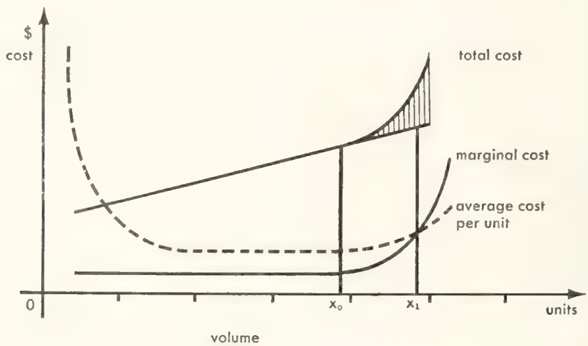


Figure 4

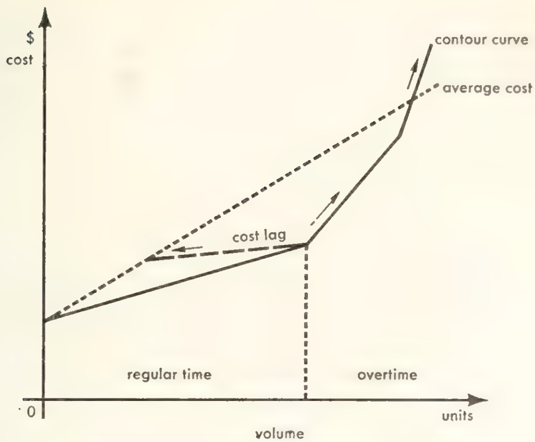


Figure 5

adaptation proves insufficient. The term refers to the addition of new (or reactivation of existing) capacity, which creates a new bloc of so-called interval fixed costs in addition to already existing fixed costs as shown in Figure 6.

The intervals are likely to be different with respect to cost or output increases.

The selective adaptation is simply observation of a specific feature of the quantitative adaptation. Rational behavior by management requires that less efficient production factors (man, machines and ma-

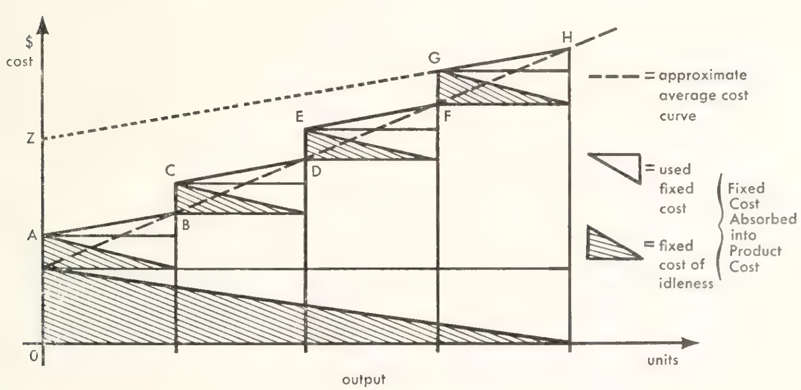


Figure 6

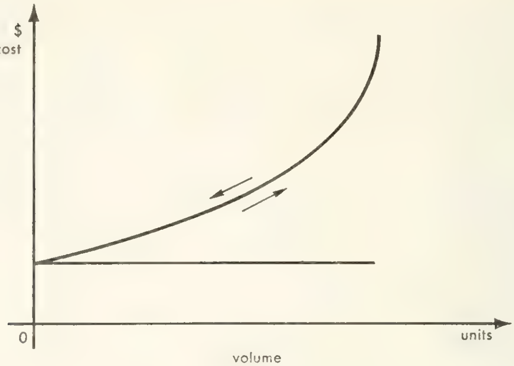


Figure 7

terials) be used last and their use be discontinued first. This introduces an upward bent into the overall cost curve (Figure 7).

Gutenberg calls the limitational (consumption) function he uses as the basis for his cost theory a *type B production function*. He thus classifies the substitutional production function on which the traditional cost theory was based as a *type A function*. This terminology has been adopted all over Europe. He also states that his cost theory can be translated into a cost curve only for a specific case — and even then certain assumptions concerning management decisions are necessary. Unfortunately, Gutenberg overstates his case somewhat by almost ruling out the existence of a production function of type A in reality. That is not true, for as Gaelweiler[17] has shown, empirical evidence from the chemical industry demonstrates incidents of substitution of input factors.

For practical applications it is difficult to define the technically determined consumption/production function. This — although used by some as the major objection — should not detract from the merits of this approach, namely, it stresses the possibility of analytical solutions. It must only be recognized, that due to rapid changes in factor quality, technology, etc. it might not be possible to define a production and cost function that is valid for the total operation in the long run. Nevertheless, even if only departmental cost functions can be defined, the importance of seemingly small, routine input decisions at lower

[17] A. Gälweiler, *Produktionskosten und Produktionsgeschwindigkeit* (Wiesbaden: Betriebswirtschaftlicher Verlag Dr. Th. Gabler, 1960), pp. 133-40.

management levels and their influence on cost development has been reemphasized. Gutenberg's approach — the first major change in European cost theory — can be classified as the most important contribution of the 1950s because it provided a new comprehensive view and at the same time the much needed stimulant for further theory development.

COST THEORY BASED ON PRODUCTION FUNCTION OF TYPE C

Production Function of Type C

This approach was developed by Heinen[18] in the 1960s. He bases his arguments on the fact that a generalized production and cost function — in spite of sufficient attention given to limitational factors, etc. — does not explicitly contain all cost influencing factors. Therefore, a production function explicitly containing all necessary details must be developed. It furthermore should not only explain cost behavior in the past but should also accommodate all or most foreseeable management decisions.

To develop such a production function Heinen distinguished between (1) repetitive input factors, which are used up immediately; for the most part these inputs are divisible into small units (fuel, supplies, etc.), and (2) potential factors, i.e., inputs such as machines and capital goods where the potential to generate output is consumed only gradually over extended time periods.

Both factors are always used jointly but repetitive factor consumption, (r_i) depends largely on the technical specifications of the potential factor with which the usage occurs. The construction of the machine or other technical data (Z), the specific use to which the machine is put (u) and environmental operating conditions (l) will determine the use of supplies, etc. therefore

$$r_i = f_i\ (z_1, z_2, z_3, \ldots ; u_1, u_2, u_3, \ldots ; l_1, l_2, l_3, \ldots)$$

For practical purposes the specific z, u, and l's are determined by engineering requirements.

Every single machine operation producing a measurable output takes a certain time period and turns out a sequence of momentary performances (L) that can be measured using a physical-technical

[18] E. Heinen, *Betriebswirtschaftliche Kostenlehre, Kostentheorie und Kostenentscheidungen,* 3rd rev. ed. (Wiesbaden: Betriebswirtschaftlicher Verlag Dr. Th. Gabler, 1970), pp. 220-307.

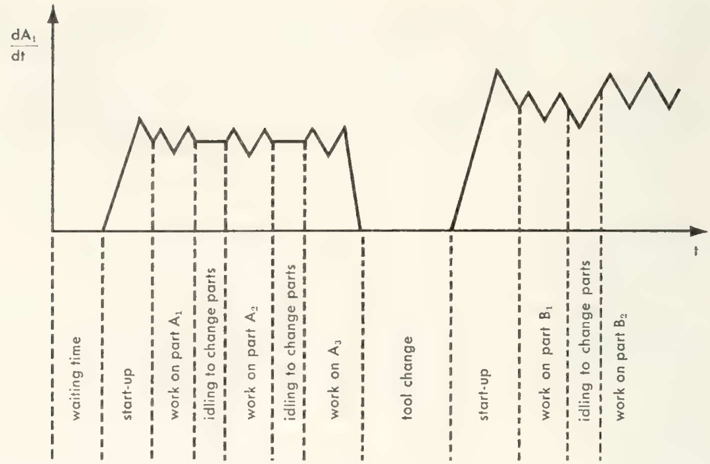


Figure 8

definition of work (A) (revolutions per minute, pounds per meter, etc.). This can be stated as

$$\frac{r_i}{t_i} = f(L) = f\left(\frac{\Delta A_i}{\Delta t_i}\right)$$

Economic performance — as opposed to the notion of work used in physics — is obtained only over a period of time, i.e., it consists of a sequence of momentary technical performances. This is illustrated in Figure 8.

If the consumption of repetitive factors is thus determined, a usage-over-time chart can be developed (see Figure 9). The input factor consumption is measured for the operation by combining momentary loads and associated consumption levels. (This is accomplished by moving from quadrant via quadrant II to quadrant III.) Mathematically, consumption of an input factor (r_i) for an operation lasting from t_o to t_j can be stated as

$$r_{ij} = \int_{t=0}^{t_j} \frac{dr_i}{dt}\, dt$$

To arrive at an operational production function Heinen designates individual operations as E-combinations (E for elementary). Every production process can be broken down into such E-combinations, the

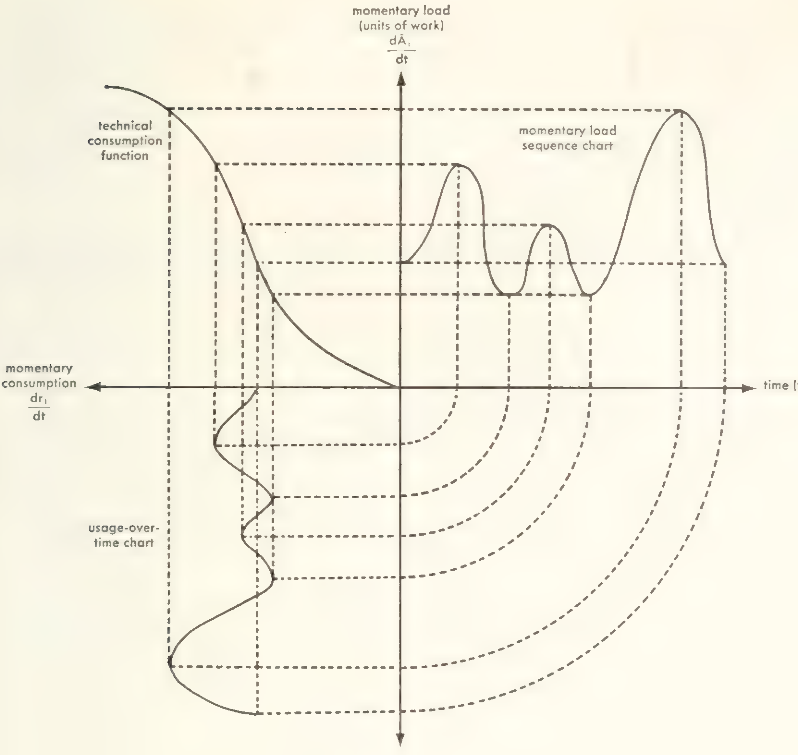


Figure 9

smallest units with which the operation can be described uniquely so that eventually consumption measures can be taken.

In Heinen's view there are four possible types of E-combinations:

1. *Output-fixed E-combinations with limitational inputs:* These represent the most frequent case in modern industry (i.e., strictly machine controlled operations). The only dependent variable is the time in which the operation can be performed (operating speed changes). Usually, however, there are only a limited number of feasible speed choices. Such an operation has one degree of freedom, i.e., gives management only one adjustment possibility.
2. *Output-variable E-combinations with limitational inputs:* These are possible in container dependent processes of the chemical industry,

transportation industry, etc. Such a process has two degrees of freedom (output level, time).

3. *Output-fixed E-combinations with substitutional inputs:* These exist in certain chemical processes where substitution of temperature with pressure or similar replacements are possible. Usually the main process then depends also on subsidiary E-combinations (pressure generation). Such a process has three degrees of freedom.

4. *Output-variable E-combinations with substitutional inputs:* Such processes exist whenever — over and above number 3 — outputs can be varied. This is largely a theoretical possibility.

Provided management freezes all variables, i.e., it decides on a specific production schedule, input factor consumption can be determined uniquely for all repetitive factors.

Consumption of "potential factors" could be measured, if the total possible output of such a factor were known. If this could be done accurately for machines, then per unit depreciation would permit proper allocation of such cost to each E-combination. A similar problem exists for labor input, for these cannot be measured accurately. By using average inputs per time period, however, a relationship between labor consumption and each E-combination can be established. Such a measurement, although rather inaccurate, is necessary to express the entire input factor consumption for every E-combination.

E-combinations can be used to describe input consumption of parts of a process or of entire manufacturing operations. A production schedule based on the desired output will then permit establishing repeat functions, i.e., statements about the number of repeats needed for each E-combination to produce the desired output.

For every manufacturing process, there are three possible types of repeat functions:

1. *For primary E-combinations,* i.e., those used to describe operations that represent immediate progress on the product, the number of repeats depends on the planned output.

2. *For secondary E-combinations* (tool changes, machine preparations, start-up, etc.) repeats partly depend on management decisions and are partly determined by output quantities.

3. *For tertiary E-combinations* (cleaning, heating, etc.) repeats may depend on time elapsed or on arbitrary decisions.

All three repeat functions should be formulated separately, but in some instances a secondary repeat function can be expressed as a ratio

of repeats required for primary E-combinations, thus simplifying the mathematical expression and the number of parameters.

Based on the previous arguments, the input factor consumption function for each operation can be stated as

$$r_i = \sum_{j=1}^{m} r_{ij} \cdot w_j + r_i(t_j)$$

where w_j represents the repeat function for all primary and secondary E-combinations; tertiary E-combinations are assumed to depend on time.

Cost Function[19]

Before a conclusion is reached about the influence (degrees of freedom) management has to determine inputs and thus cost, it must be recognized that all potential factors used in a given process have certain quantitative and qualitative capacities (operating skill, special material requirements for certain machines, etc.) that restrict the number of realizable E-combinations in most cases. Since all such restrictions are not shown explicitly in the above production function, these must be added and expressed in appropriate terms to relate them to the repeat functions. A constraint in time t for the potential factor j then becomes

$$T_j \text{ total} \leq \sum_{j=1}^{m} t_j \cdot w_j$$

To transform a consumption function into a cost function requires valuation. Using outside prices for cost valuation may suffice for accounting (i.e., recording) purposes, but it is hardly satisfactory for decision making. In many instances no single price adequately serves all decision purposes. In some cases market prices are preferable and in others use of opportunity cost is advisable. Heinen concludes that goal oriented values should be used but this requires a separate cost value theory. If — to illustrate this point — profit maximization is regarded as the goal, then every input can be subject to a different valuation depending on its possible use. These can be factor combination uses (production) or isolated uses (direct sale). In turn uses can be time elastic (carry-over into next period) or time nonelastic (perishable goods).

Profit maximization must be accomplished simultaneously for all possible uses. Mathematically the computation of Lagrangian multi-

[19] Ibid., pp. 309-62.

pliers, i.e., shadow prices, will rank resources properly for this purpose. To deal with zero-shadow prices — which cannot be used for accounting purposes — Heinen suggests substitute values. In cases of open decision fields (i.e., situations where no scarcity and no use limitations exist) he recommends acquisition prices. In his opinion, this will guarantee availability and continued production, even if higher prices develop later. For closed decision fields (with acquisition [input] or usage [output] restrictions) some shadow prices are available and should be used. If no shadow prices can be computed, market values should be used to secure goal-oriented decisions. All goods should if they are not subject to restrictions or do not reach either maximum or minimum usage levels be treated as if they belonged to an open decision field.

Although some critical arguments may arise over Heinen's cost value theory his basic assumption that such values are needed to guide proper decision-making is acceptable. From this it follows that such values need only to be sufficiently accurate to serve this purpose and that there is no need to use best values.

Cost theory in Heinen's view has (1) an explanation function and (2) a decision or cost influencing function. Only if these are clearly separated can further progress and proper application be expected. For explanation purposes, he accepts Gutenberg's cost determinants with some minor modifications. Particularly noteworthy is his criticism that production program, plant size, and volume cannot be defined clearly in multiple product situations, and his observation that multiple and mutative capacity changes occur together and influence qualitative and quantitative capacity jointly. He further points out — if external prices are used — that price changes usually lead to a discontinuous cost curve.

If cost theory is to be used as a decision tool, it must be assessed differently. Decision-making should be delegated to the lowest possible level to use all available expertise. Furthermore, most decision-making processes are sequential rather than simultaneous. This means that more and more action parameters (or variables) are frozen at a certain point, thus narrowing management's room for maneuvering with every single decision. In view of this, the identification of nonoverlapping cost determinants becomes indispensable. These determinants might be considered and isolated at different managerial levels with a full understanding of the consequences.

To clarify matters, Heinen separates cost determinants on the basis

of their controllability into: cost coefficients (empirical technical data not usually subject to change at management's discretion), and action parameters (these can be changed by managerial decisions).

If separated into groups by their nature, cost determinants can be distinguished as follows:

1. cost value;
2. production program; and
3. production technology and organization, which in turn consists of
   a. available equipment configuration; and
   b. manufacturing process.

The influence of values on cost has been mentioned earlier. The production program of a business is a potential program (all potential E-combinations) determined by available potential factors (equipment) and their capacity. Repetitive factors are usually nonrestrictive. The segment of the potential program used is called the actual program. This can be adjusted with respect to total operating time, factor combinations, and also sequencing of E-combinations.

Production technology and organization refers to the optimal combination of E-combinations. The available equipment configuration is indirectly described by all possible E-combinations. Assuming the actual program has been selected, available production factors limit capacity, thus permitting only a limited number of cost adaptations. A change in the physical arrangement of the equipment will influence the number of E-combinations by adding or omitting some combinations.

The influencing factors of the manufacturing process are included in the cost function by way of E-combinations (assignment of work to equipment and work groups). This may change, particularly if the available capacity is not fully used. Such decisions are frequently made by lower management. Farming out operations or selling intermediate products may further influence cost (although storage decisions are not part of the cost function). Other parameters that can be determined as part of the manufacturing process are lot size, output level of output variable E-combinations, operating speed, etc.

This list is not exhaustive but it does show that volume, plant size, or factor quality are no longer used as cost determinants. Heinen regards these as rather ambiguous and better used as broad planning concepts. Volume particularly is hardly subject to change after other parameters have been frozen — all of which together influence volume. An attempt can also be made to group cost determinants according to

their controllability or the time span during which a change may take place. This adds another dimension to the analysis of the decision-making process omitted in traditional cost theory — at least not recognized explicitly in terms of individual parameters.

Finally, it is obvious that goal-oriented successive cost determinant freezing decisions are possible only if some knowledge of the overall cost function exists. In addition, such partial decisions are frequently based on expectations concerning the actions of other departments. Since there is no certainty regarding decisions by other departments, all cost functions — at least for predictive purposes — will become normal. Cost theory should, therefore, deal with this aspect also. It should, in other words, analyze not only the width of each cost band but also the influence of decision combinations.

Heinen's theory, although incomplete in his own view, seems to open up a new approach that eventually may lead to programming all of a firm's feasible E-combinations and selecting — heuristically — a low-cost program on the basis of such cost functions. This approach has moved a step closer to becoming applicable in business with the identification of E-combinations and cost determinants in greater detail than in the past.

SUMMARY

The development of European theory seems to imply that the gap between the traditional, rather theoretical approach on one side and the empirical cost functions for limited ranges on the other side can be closed gradually through the analysis of cost determinants. It also shows that with such analytic thought processes — which in some isolated instances are verifiable in reality — the model-building process to develop cost functions can be continued, eventually resulting, it is hoped, in uniquely defined modular components of cost functions that can be applied directly in various environments. Such components of cost functions eventually can even be validated for specific operations — at least for a limited output range.

Heinen's approach, particularly his arguments in favor of cost values, which serve as decision guides at lower management levels, appears promising, but it also suggests that more research is needed into the selection of appropriate values for certain goals. Even before such results are available, and perhaps as a precondition, management accounting data should be segregated from financial accounting information in the United States as it is done in other countries. If this

is not done the development of management accounting may be curtailed because of financial accounting restrictions. Altogether, the European microeconomics-based approach suggests that certain steps toward closing the gap between operations research and decision models on the one hand and management accounting on the other have already been taken. To avoid unnecessary duplication, these should at least be recognized. On such a foundation further improvements — for example, the integration of the learning curve phenomenon into existing theory — are obvious. Furthermore, decision simulation for partial or total operations appears to be feasible, if programming of cost behavior is facilitated by the existence of a fully developed and validated theory.

Managing International Financial Transactions

R. GEOFFREY BARDSLEY*

I once studied a little accounting because the Bank of England insisted that one take certain examinations at the London Institute of Bankers. I absorbed with reasonable ease the premise that for every debit there must be a credit, which seemed logical and reasonable. But when I found that I was supposed to identify the credit that corresponds with a particular debit and, having identified it, decide into which general ledger account it had to go, I gave up. Ever since then I have pictured accountants as a kindly group of experts on whom, hopefully, I could rely if need be.

I come from the treasury side of corporate life. Generally corporate life is divided in the financial sphere between the controller function, which is accounting in its broader sense, and the treasury function. Treasury people manage the money. The discussion will deal mainly with the financing side of a multinational corporation. Since my subject is managing international financial transactions, I shall discuss managing those operations.

First I would like to present a very brief rundown on Xerox Corporation's multinational background to establish the size of the operation

* R. Geoffrey Bardsley was born in England and recevied B.A. and M.A. degrees from Cambridge University, where he majored in modern languages and history. After four years with the Bank of England, Mr. Bardsley emigrated to the United States in 1956. He held positions in the international divisions of several New York banks, and from 1967 to 1970 was Senior Vice President and Manager of the International Division of National Bank of North America, New York City. In May 1970 Mr. Bardsley joined Xerox Corporation as Manager, International Banking and Investment. In this capacity he advises Xerox management on all aspects of international finance.

with which we are dealing; this has relevance to a corporation's style of management. Secondly, I will try to indicate what kind of policies might be used in a multinational corporation with respect to the international financial function. And, thirdly, I would like to try to develop some ideas about methods and procedures for the implementation of these policies. Finally, I will have a few brief concluding comments.

In 1971 total worldwide revenue of the Xerox group was just under two billion dollars, of which 34 percent came from international operations. These figures give some idea of the operations and show both the tremendous involvement of Xerox, a fairly typical large multinational corporation, in international business, and the consequent importance within a corporation such as this of the international financial function in the broad sense, not only in the arranging and managing of money, but also in the accounting and control area.

There is another peculiarity affecting the Xerox style of management: about five-sixths of our international business is conducted by a joint venture with a British partner located in England affecting the style of management that is used with this huge operation.

What should be the policies of a United States-based multinational corporation in managing its international financial function in a multitude of countries? Envision a line with centralization of control at one end and decentralization of control at the other end. These are the two extremes of management choice and most corporate managements choose a spot somewhere between these two extremes. Very few organizations are at either extreme. Those with completely centralized management tend to be the smaller corporations that are venturing overseas for the first time, with management in this country anxious to keep very tight rein on the activities of their overseas managers. You will, I think, find very few at the other end of the spectrum because there are undoubted advantages, which I will try to describe to you, in the head office having some degree of centralized control over the overseas operation. This applies not only to the financial function but to all aspects of the operation.

Before discussing the question of objectives that lead to the establishment of policies, I would like to outline a few of the differences between problems that arise in the financial function of an overseas operation and those that arise in the domestic operation. The first and most obvious difference is distance. It is much easier to catch a train in New York City or Chicago and visit a plant, a controller, or financial manager 250 or even 1,000 miles away than it is to leave the

office in New York City or Chicago, go out to the airport, and catch a transatlantic or transpacific flight lasting five, seven, or even twelve hours to achieve the same purpose. It takes longer for cables to arrive, for correspondence to be delivered, and for telephone calls to be placed. Distance is a fact and a factor.

Time differences also exist as well. There are time differences between the East and the West in this country, but they are nothing compared with the Eastern seaboard of the United States and, say, Australia. If I wish to speak to our financial manager in Sydney, Australia, I would probably do better to call at midnight my time and catch him coming back from lunch. Conversely, if one of my colleagues in London walks into his office at nine o'clock in the morning, finds a problem he wants to discuss with me, and calls immediately, he will awaken me at 3 o'clock in the morning. He would not get a very coherent response. These are facts that must be considered.

There are the questions of nationality and language. The normal language of a United States multinational corporation tends to be English, but if you are trying to communicate with someone from Holland or Japan it may be difficult. Customs and traditions are still different. The legal and tax systems differ in most countries. This infringes on the financial function. And accounting conventions differ. Be it the way flour is recorded on the inventory of a British milling company; be it the way a German company prepares its profit and loss statement; or be it a simple thing such as the treatment of current liabilities in the British balance sheet. If you are trying to raise money from the foreign branch of a United States bank on the basis of a sterling balance sheet, you would do well to familiarize yourself with the British accounting conventions and to translate the sterling figures into their dollar equivalents to provide the banker, who has, perhaps, an overemphasized idea of the importance of things like working capital, with an Americanized version of this balance sheet.

The money markets overseas are very different from those in the U.S. They vary in size and are by definition smaller. A major difference between United States and foreign financial management is that you are dealing overseas with foreign currencies. You are subject to devaluation, revaluation, and fluctuation, things that can make a tremendous difference to your profit and loss statement at the end of a year. A financial manager must be alert to these possibilities and take action within the bounds of governmental and legislative limitations to guard against loss in these circumstances. There are exchange

controls. If you have a Brazilian company generating a handsome profit, you cannot bring back 100 percent of the company's profits in the dividends of your parent company because you fear that the cruzeiro will again be devalued, without incurring some very substantial and punitive international taxes. These are measures of exchange control with which everyone must be familiar.

There are the overriding questions of governmental intervention. There is frequent governmental intervention in the United States, and an even greater degree of governmental involvement in overseas operations. These then are a few of the problems with overseas operations that one does not find here.

With these problems as background, what should be the objectives of the international finance manager sitting in his office in New York or San Francisco, anxious to raise money to finance his operations overseas? Well, there are many. The first and essential objective is that the operation must be financed. There must be enough money to build the factory, to buy the factory equipment, to meet the payroll, to finance inventory, and to carry customers' receivables. You must make sure, of course, that the business has enough money available. There is no point in having money available six months before you need it because you will lose money on its reinvestment, nor is there any point in having money six months later than you need it. Sufficient money is necessary in a domestic operation, as is minimizing the cost of financing. Creditor bankers wish to earn as much money as they can. Having been a banker myself for almost twenty years, I know that they are very anxious to keep the interest rates and commissions high, to charge a fee, etc. The finance manager must keep those charges down. Then there is the question of exchange losses which, of course, must be minimized, and other problems that do not exist when you are dealing only with the United States dollar or with any other national currency in its legal country. And finally, I would suggest that the money manager and the treasury operation have the responsibility of ensuring that investment income is optimized and that surface funds are invested safely, at the best possible return to the corporation, until they can once again be employed in the corporation's business. These, then, are the objectives for which the finance manager should strive.

What policies might be followed to achieve these objectives? Now, as it was suggested earlier there are the two extremes of completely centralized control and completely decentralized control. I would sug-

gest that for a fair-sized multinational corporation a mixture or blend of the two would be best. I would suggest centralized coordination — not control — with the overseas operation unit responsible for day-to-day operations and decisions up to a certain level. Why? Because I believe that centralized coordination insures the best use both of corporate resources and of the multinational corporations credit on a multinational scale. We should use the parent company's balance sheet and the cash flow strength to secure financing for its overseas subsidiaries that by definition are smaller and usually weaker than the parent company. Other areas also demand centralized coordination. One is the management of foreign exchange exposure. If your German company has net assets in French francs and fears that the French franc is going to be devalued against the deutsche mark, it may very well take action, if it is left alone, to reduce or eliminate its net assets position in French francs. On the other hand, your Spanish company may have an offsetting position that would make this action by the German company unnecessary. With an overview of these two positions you can then make the decision that your German company can run this position because your Spanish company's position will offset it, bearing in mind, of course, the tax implication in both countries. These are some reasons why I feel that centralized coordination is good.

Another reason is that local foreign management tends to lack the overall viewpoint and often has limited expertise. The expertise tends to be concentrated at the head office or at the regional headquarters. Independent local decisions, as I have also indicated, can often cause problems or can even cause losses. On the other hand, too much centralization of control by the head office tends to kill local initiative. If you have a bright financial manager in Milan and you ride herd on him by questioning his every decision and making him refer to the head office in this country, if it is near enough, you are going to lose him. If you do not lose him you are going to kill his initiative and when the time comes that you need him, he will not be there. Either he will not be there physically or he will not be there mentally — he will not be alert any more. Overcentralization is bad for this reason. Overcentralization causes delay when it requires every action to be referred to the head office. I mentioned time differences and distance earlier — these delays can cost money. The head office cannot be up to date on the latest developments and local conditions in every money market throughout the world. It is simply impossible, but local

management is or should be completely up to date on what is going on in its own money market regarding higher money, interest rates, attitudes of lenders and everything else that goes into making a financial decision. Therefore, I would suggest that up to a point, it is more efficient to leave certain decisions in the hands of local management.

How do you put into practice the qualities that have been indicated? I wish to discuss this under three brief headings: first, the organization that might fit the requirements; second, the procedures that should be instituted to achieve such qualities; and third, the control mechanism that is required to ensure that the necessary procedures are, in fact, followed. The organization can vary widely. Every corporation in the country and in the world doing international business seems to have a different method of management. Therefore, whatever I suggest is just one of many possibilities. If you want a measure of independent decision-making in the foreign operating unit you, of course, must have a financial organization in those foreign operating units. The structure and sophistication of each unit depends upon its size. There is no point in having fifteen men in the treasury function of a company that does ten million dollars worth of business a year. Conversely, if you have a company doing $150 million dollars of business a year you would be remiss if you had only one or two men in the financial function. One must bear in mind, of course, that the better the man or men, the more expense is involved, so you need to strike a balance between what you need and what you can afford. One solution is to group a number of small overseas subsidiaries in one particular geographical area with a regional headquarters for the financial management of all those companies. The financial manager overseas normally has an open line to his chief executor, who is his boss, pays his salary, and is responsible for his report. He will also have an open line to the treasurer of the parent company, which for our purposes is in this country. The head office staff normally has a functionary who may be called the assistant treasurer for international operations, or the director of international finance or some other glorified title. He is responsible to the treasurer of the corporation for coordinating, interpreting, and filtering the ideas and proposals of the foreign financial managers. So much for the organization — overseas and domestically.

Then comes the procedure for making sure that these policies are implemented. It depends to a great extent, once again, on the sophis-

tication of the corporation, the competence of the overseas staff, and the management philosophy. The larger and more mature the international corporation is, the less it will insist on reserving the decision-making process to the head office. I will suggest a few decisions that might be reserved for the head office, a few that might require the approval of the head office, and a few that might be left to the foreign operating unit. Items that should or might be referred to the head office for approval would include such items as changes or increases in capitalization, or acquisition of land or buildings by the foreign subsidiary. The negotiation of loans over a certain size, I think, is almost always referred to the head office for concurrence and approval. Changes in banking relationships are usually referred to the head office, especially if they involve changes in relationships with foreign branches of American banks, because such action by a foreign subsidiary can affect the head office. The parent company's relationship with the head office of that bank over here could be affected. Again, investments over a certain size and acquisitions of other companies would normally be referred to the head office for approval.

A few decisions should be completely reserved to the head office because the foreign subsidiary cannot get an overall view of their implications. One, as mentioned earlier, is foreign exchange exposure or its elimination when the head office must arrive at a net exposure plus or minus in each currency on its local basis. The second area of decision-making that would normally be dictated by the head office is the dividend policy. If you let your general manager overseas decide when he is going to pay a dividend, you probably will never get a dividend because the general manager likes to be in charge of a highly liquid, powerful, and rapidly expanding company. Among the ways in which he can achieve that is to retain all the earnings under his own control. He will then be very popular with his local bankers and will get many invitations to dinners and receptions. This, however, does not do the shareholders back here much good, so I suggest that the parent company will want to tell the subsidiary company when it wants the dividends honored. The subsidiary may then say, "We do not have the money." or "We will not have the money." or "We have waited because the tax on dividends is going to be cut six months from now so why not wait until then?" The two sides can work these things out. The third item normally referred to the parent company is the issuance of parent company guarantees on foreign subsidiary followings. This is a prerogative of the parent company since it has to issue them

and, as auditors know, the parent company may very well have restrictions on its various loan agreements in its own country that may prevent or inhibit it from issuing guarantees over a certain amount.

What decisions might remain the discretion of the local operating subsidiary? They are really the converse of some of those that I said should be referred to the head office for approval. One ought be able to trust one's foreign management to negotiate small pieces of financing and loans under a certain size. The more competent the management, probably the more leeway you will give it. You may have certain rules for another. This applies to bank relationships. If the subsidiary in Mauritania wants to open an account with the State National Bank of Mauritania, that is not really a concern of the head office. If they want to close an account with the Thirty-first National Bank of New York City, this is a different matter. The head office needs to know about it. Again, investments up to a certain level might very well be left to the discretion of the local operating company. So much then for procedures and the thresholds of decisions between the head office and the foreign subsidiary.

It is all very well to establish rules but if you do not see that they are implemented, a strong-minded financial or general manager overseas may discover that he can ignore them with impunity. This is not in the interest of the shareholders. Therefore, there must be some procedures to enforce the observance of whatever rules are established for the management of the international operation. A fairly simple procedure is to require the approval or concurrence of the operating subsidiary's board of directors for those items that I have said should be approved by the head office. Also, the minutes of the board of directors meetings should be sent to the parent company for monitoring. If one receives a copy of the minutes of the board meeting and finds that they have recently negotiated a loan of $5 million whereas their limit is $3 million then some fairly warm cables can be addressed to the management of the overseas subsidiary.

Reports are a necessary evil but everybody has to supply them. They should be kept to a minimum. Certain minimum reporting procedures are necessary to ensure observance of the rules I have suggested. They would normally include statements on cash, loans outstanding, investments on the books, and the rates of interest on these loans or investments. There should be a statement and a forecast of foreign exchange exposure. And, there should also be forecasts of cash to be generated in or incurred by the company over the next several

months to give both local management and parent company management an idea of the amount of financing that might be required or of the amount of surface, investable cash that might be generated in the operation over the coming time period. Visits should be made in both directions. This is vital, not only for the treasury function but also for the control accounting function, the marketing function, and so on. When you and your overseas colleagues have been away from each other for more than two or three months you tend to loose contact. One must go over there to see them; they must come here to see us. Other normal contacts such as letters, cables, telex, and telephones also serve to establish personal relationships, feelings of trust, and respect, one would hope, between the head office management and the management of the overseas operation.

Briefly I will touch on the responsibilities of the head office. Because the head office sits in the center of a worldwide spider web of operations, it must reply promptly to requests for guidance or approval from operating companies. There is no point in having a head office if it takes ten days to answer every urgent request for guidance or approval that comes from across the ocean. The head office must have knowledge of overseas operations and of overseas finances and markets; it must maintain contact with international markets by sending members of the management to visit them. In United States markets this is done mainly through business contacts with bankers and also with colleagues. Clear rules must be established. I think we all have seen cases where the head office says to the foreign subsidiary, "Why in the name of heaven did you do that?" And it replies, "Because you said we could do it." Then the head office says, "You're crazy, I never said that." And the foreign subsidiary retorts, "Oh, yes you did. Two years ago, last July." And the parent company says, "Conditions have changed!" And the foreign subsidiary says, "Yes, but you didn't tell us the rules have changed." This has happened to me. You feel very embarrassed when you know that you have fallen down on the job by not giving clear directions to the foreign subsidiary. One has to offer advice and not wait for advice to be solicited. One must explain one's reasons, and, as I mentioned earlier, one must establish trust and respect between the head office and the foreign subsidiary.

In summary, I have tried to present an outline of international financial management from the treasurer's office point of view by looking at the problems, the objectives, the policies, and practices. I have also suggested some responsibilities of the head office staff and I

want to conclude by saying something about liaisons. It is very important that at the head office level there be mutual understanding between the accountants and the controller's staff, and the money managers in the treasurer's office. They are often interdependent. The controller needs the views of the treasurer's department, for instance, on devaluation or revaluation so that he can tell the president of the company what his best estimate is of the profit and revenues of the corporation for the forthcoming period. For example, I was recently asked about the following situation: Last year there was a scare about the Mexican peso. We have substantial revenues in Mexican pesos but we report to our shareholders in United States dollars. Do you think the Mexican peso may be devalued in 1972 or 1973? I thought that there was no danger of the peso being devalued this year and I did not anticipate any danger next year. If, however, I had foreseen some change in the currency and did not warn the controller's department, he might have given the management an erroneous forecast of the corporations revenues and profits. Conversely, in my own area of money management we must have at least some smattering of the accounting rule for foreign exchange translation before we take various actions. I could give you a long list of things we considered doing before we had the foresight or the good luck to consult with the accountants, who said, "If you do that you are going to have to recognize a gain or recognize a loss before we would otherwise have to do so, and if it is a gain we are going to have to pay taxes on it, and if it is a loss you are going to have to explain why you have caused that loss to arise this year." So I think that it is very important that there should be a liaison between the accountants and the money managers in a large corporation. I hope that this brief and very incomplete outline of the treasury function in a multinational corporation will help those of you teaching, studying, or practicing international accounting to see and understand the full implications and scope of the international financial function.

Brazil: A Maturing Capital Market Seeks Accelerated Improvements in Accountancy

TERRENCE J. MC MAHON*

The Government of Brazil, acting through its Central Bank, is about to launch an innovative program which will accelerate and improve the development of the country's Capital Market. The Agency for International Development, the International Bank for Reconstruction and Development, and two of the GOB's major banking organizations will jointly provide a $50 million revolving Capital Market Development Fund. The fund, known as FUMCAP, will be administered by the Central Bank and will provide low-cost financing for firm offer underwritings of long-term corporate bonds and shares.

FUMCAP will broaden and stabilize the Capital Market while providing long-term corporate financing at reasonable costs. These achievements will be attained through: facilitating firm offer as opposed to best efforts underwritings; stimulating the development of a corporate bond market; and requiring the adoption of significant regulatory changes to improve the Capital Markets practices and procedures and thereby promote confidence and participation.

Before considering how FUMCAP will accomplish its purpose, it is important to understand how demand for the program evolved.

* Terrence J. McMahon is a member of the United States Agency for International Development Mission staff of Rio de Janeiro. He has served the agency for three years, the first two in the Washington headquarters. Mr. McMahon is a CPA and has had extensive public accounting experience with Lybrand, Ross Bros. & Montgomery. Mr. McMahon is a graduate of the College of Commerce and Business Administration of the University of Illinois at Urbana-Champaign. He is a member of the American Institute of Certified Public Accountants.

THE ECONOMY AND INFLATION

The gross domestic product of Brazil totalled $43.9 billion in 1971 as compared to an average GDP of $27.3 billion for the years 1966 through 1968. The real annual rate of growth in terms of the GDP was 9% in 1969, 9.5% in 1970, and 11.3% in 1971. It now appears that the country will maintain an average growth rate of 8% during the decade of the 70's.

Brazil has achieved substantial reductions in the rate of inflation during the last seven years. The rate for the period 1969 through 1971 has approximated 20% and the Brazilian Government believes that the rate can be reduced to 15% in 1972. Government efforts to reduce inflation have also been accompanied by measures to stimulate the Capital Market. Monetary correction of the principal of fixed income securities has been introduced to assure a real rate of return to the investor. Most short-term instruments now have a pre-fixed monetary correction while treasury bonds and other monetarily corrected long-term obligations are adjusted in accordance with the wholesale price index. Indexed monetary correction is achieved by periodically increasing the principal in accordance with the index and by computing interest payable each period on the adjusted principal. The total amount of the monetary correction is paid upon maturity of the instrument.

LONG-TERM CORPORATE FINANCING

In spite of the impressive economic growth of Brazil and significant reductions in the rate of inflation, Brazilian industrial companies have not been able to obtain a proper balance of debt and equity financing for construction, expansion, and improvements. Long-term financing needs have been provided for the most part from equity investments and the retention of earnings. To a lesser extent, companies have turned to foreign loans and short-term costly borrowing. Private long-term debt financing is virtually nonexistent and government institutions are unable to adequately meet the financing demands of private industry. No corporate bond market has been created in Brazil; the few bond issues which have been offered have been convertibles.

In addition to the lack of long-term debt, companies in Brazil have been faced with certain inherent disincentives to going public. Underwriters have consistently underpriced new issues, purportedly for the purpose of free riding or to achieve immediate placement.

Free-riding — an underwriting practice of withholding and later profiting from early market price increases — may have coincidentally hampered the development of a bond market; underwriters will have had little incentive to introduce long-term debt instruments while enjoying the profitability of free riding. Issues may also have been underpriced to achieve immediate placement because of the high opportunity cost of tying up the underwriter's funds during a prolonged placement period.

FIRM OFFER UNDERWRITINGS

In order to promote firm offer underwritings, FUMCAP will open standby lines of credit to qualified investment banks which have demonstrated to the satisfaction of the Central Bank that they are financially sound and technically competent to act as financial agents of FUMCAP. To draw on its line of credit, the participating investment bank will submit to FUMCAP its underwriting proposal together with the issuing company's registration statement. FUMCAP approval of the proposal and issue will permit the underwriter to draw on its line of credit as follows: Loans for the underwriting of shares will be provided for periods of up to twenty-four months at an annual cost of 6% plus monetary correction. (The rate will become progressively higher after the eighteenth month.) Loans to finance the underwriting of debentures may be extended for a period equal to the life of the debentures which must have a minimum term of three years. The charge for debenture underwriting loans will be equal to the coupon rate plus monetary correction. Both types of loans will be self-liquidating in that the investment bank will have to make immediate loan repayments, equivalent to the proceeds of the securities sold on the market. Any outstanding balance due under a share loan at the end of the twenty-fourth month must be repaid then whether or not the securities have been sold.

PRICE STABILIZATION AND LIQUIDITY CREDITS

Apart from the $50 million devolving fund to be utilized for underwriting credits, the Government of Brazil will provide $7.5 million for price stabilization and liquidity credits. These funds will be used to encourage market-making for each FUMCAP-supported issue and will be made available to investment banks and through them to designated brokers. The stabilization credits may be used to support the

offering price of shares during the placement period while the liquidity credits will be used for the purpose of creating a secondary market for the debentures. FUMCAP will not permit the drawdown or retention of such funds when the share price is above the offering price or when the bond price is greater than its original price plus accumulated monetary correction. Price stabilization and liquidity credits will be self-liquidating in that the underwriters and brokers must repay amounts borrowed upon sale of the securities. Price stabilization credits for shares will be available for eighteen months after the offering date at a charge equivalent only to monetary correction. Liquidity credits for bonds will be available for a period up to twelve months before maturity at an interest rate equivalent to the monetarily corrected coupon. Price stabilization and liquidity credits will be limited to 15% of the value of FUMCAP financed underwritings.

DEVELOPMENT OF A BOND MARKET

The lack of private long-term debt financing for industrial expansion has deprived companies of financial leverage and required heavy reliance on retained earnings as the principal source of funds for expansion. FUMCAP will make available underwriting credits for indexed straight debenture bond issues and liquidity credits to provide the essential secondary market for these issues. In so doing, FUMCAP expects to stimulate the development of an active bond market in Brazil. The debenture bonds underwritten with FUMCAP credits will yield a real annual interest of 10 to 13 percent. Companies should begin to benefit through leveraging equity capital with long-term debt and substituting debentures for short-term borrowings which currently bear a real interest rate of 18 percent or more. Investors will benefit through obtaining a new fixed income, long-term investment which will bear a higher real interest rate than most other available instruments. Market making activities financed by FUMCAP will provide the bond investor with adequate assurance of liquidity.

STOCK MARKET ACTIVITY

Before considering the regulatory measures, it may be useful to comment briefly on the Brazilian stock market. During 1970 and for the first six months of 1971 the Rio and São Paulo stock exchanges recorded incredible increases in the values of shares traded. Substantial funds flowed into the narrow market which consisted of only about eighty actively traded stocks. The boom which peaked in June then

ended, and a substantial decline occurred as a result of profit taking and an introduction of new issues. In spite of the decline, the market is still narrow and new issues are becoming more difficult to place.

REGULATORY ISSUES

FUMCAP's third major objective has been to require the adoption of significant regulatory changes to improve the Capital Market's practices and procedures and thereby promote investor confidence and participation. At an early stage in the development of the FUMCAP plan, the Central Bank decided to require that registration statements and underwriting proposals for new issues will have to be accompanied by a prospectus which will be available to the public. The prospectus requirement represents a major step in the government's Capital Market's regulations and serves as the foundation for additional regulatory provisions.

Essentially, the additional regulatory provisions which required early attention can be narrowed to three general issues of major concern: (1) the development and promulgation of a minimum set of accounting principles and auditing standards; (2) the development of disclosure requirements with respect to management remuneration and insider transactions; and (3) the development of adequate rules relating to bona fide distributions.

BONA FIDE DISTRIBUTIONS

The issue of bona fide distributions has arisen principally because of the apparent prevalence of free riding. Virtually every new stock offering which occurred during the market boom was a hot issue. Market prices were immediately quoted at amounts substantially higher than the offering price. Portions of new issue shares, if placed in accounts owned or controlled by underwriters, were then sold in the market at considerable profits after speculation caused the trading price to rise rapidly.

The practice of underpricing new issues and free riding has an adverse effect on investor confidence and denies to issuing companies proceeds which would be available from realistic offering prices. Unfortunately, free riding has been the principal source of underwriting profits in Brazil and must be reduced rather than abruptly curtailed while underwriters and issuing companies begin to accept commissions as the legitimate source of profit to the underwriter. Moreover, some withholding by underwriters is probably necessary for market

making because Brazilian law prohibits short selling and, therefore, eliminates the price stabilization which normally results from short selling by market makers. The Central Bank has adopted a policy of limiting the portion of an issue which may be withheld by underwriters or placed with associates or controlled mutual funds. The initial limitation will be 20 percent and will apply when public subscriptions exceed the shares available. This restriction on withholding should substantially limit the practice of free riding.

MANAGEMENT REMUNERATION AND INSIDER TRANSACTIONS

Brazilian registration requirements have not required disclosure of salaries, bonuses, and other remuneration received by management, or information relating to transactions between the company and its management and other insiders or affiliated persons. In recognition of the need for disclosure of management remuneration, the Ceneral Bank will require that registration statements and prospectuses disclose salaries, bonuses, and other remuneration for management taken as a whole. The requirement for disclosure of insider transactions will be included in accounting principles which are to be published by the Central Bank. It is the bank's present intention to require that notes to the financial statements disclose all transactions between management and the company or its affiliates.

MINIMUM SET OF ACCOUNTING PRINCIPLES AND AUDITING STANDARDS

One of the major indirect benefits of the FUMCAP program will be requirement that the accounting profession assume a much more responsible role in financial reporting and in developing standards and principles which will ensure that financial information supplied to regulatory bodies and investors is reliable and complete.

The first step in upgrading the profession has already been taken by the Central Bank. Based on the bank's recommendation, societies of public accountants in three cities of Brazil have joined together for the first time in a single Institute of Independent Auditors of Brazil. This single institute has been officially recognized by the Federal Accounting Council of the Ministry of Labor. The Institute should serve the important purposes of: improving upon accounting principles and auditing standards to be promulgated by the Central Bank; and eventually establishing standards of technical competence to be met by accountants who seek licenses for public practice.

The Central Bank will require that financial statements submitted to the bank with registration statements and annual reports include the opinion of an independent public accountant. The two serious questions which arose as a result of the decision to require certified statements were, (1) Who is qualified to express opinions on such statements? and (2) What accounting principles and auditing standards will be followed in the preparation of the statements and the conduct of the audit examination?

First, consider the question of who is qualified. Under Brazil's formal education system, a certification in accounting is automatically obtained after graduation in accounting from any of the officially recognized colleges upon completion of the regular four-year course established by federal legislation. No uniform standard of qualification based on competence or experience is required for such registration. On the other hand, there are several highly competent and respected public accounting firms in Brazil including, but not limited to, those which are affiliated with internationally recognized firms. Clearly, a uniform system of evaluation is needed in Brazil to determine eligibility for certification. The development of such a system will be time consuming, and in the interim, the Central Bank or its designee must necessarily evaluate the qualifications of practitioners who are proposed by underwriters and registrants for the examination of financial statements to be submitted to the bank.

The second problem has perhaps been even more difficult than the first. No generally accepted accounting principles or auditing standards have been promulgated in Brazil by an officially recognized organization or, as in the United States, by a single professional society which establishes the norms for the entire accounting profession. Qualified practitioners are quick to point out that they adhere to principles and standards which may be described as international but agree that the term "generally accepted accounting principles" cannot be tied to any authoritative pronouncements in Brazil. Many major practitioners also agree that the lack of a single, unified professional body has prevented the profession from self-regulation. The Central Bank, with considerable support from professional accountants, has therefore set out to fill the void by developing a minimum set of accounting principles and auditing standards. These principles and standards, once published, must be adhered to in the preparation and audit examinations of registrants' financial statements. Equally important, the minimum

set will presumably initiate a continuning process of review, interpretation, and development of the principles of accounting and reporting.

The task of developing a minimum set of principles and standards appeared formidable to officials of the Central Bank and to accountants who were seriously concerned about the need for an early codification. United States accountants might have assumed that minimum auditing standards would be similar to those shown in the AICPA's "Statements on Auditing Procedure No. 33" and that the accounting principles would resemble those listed in Accounting Research Study No. 7, "Inventory of Generally Accepted Accounting Principles for Business Enterprises." The Central Bank was of a different mind; the standards and principles which will be promulgated are distinctly Brazilian. Rather than beginning with American standards and attempting to tailor them to suit the needs of Brazil, the Bank decided to recognize existing Brazilian practices and to require that certain of these practices be uniformly followed and that others be changed to better assure uniformity, consistency, and adequate disclosure in audited financial statements. The Central Bank's efforts have produced a rather comprehensive listing of standards and principles which does, in fact, include nearly all of the major subject areas which Brazilian professional accountants would expect to be addressed in such a listing.

U.S. VS. BRAZILIAN STANDARDS AND PRINCIPLES

A study in depth of the differences between United States principles and the minimum set of Brazilian principles would be premature. It may be useful, however, to consider some examples of differences. The auditing standards, as drafted, do not differ significantly but do include a requirement that the auditor express his opinion on the adequacy of the company's system of accounting and internal controls. There are probably as many reasons to oppose this requirement as there are to favor it, but it is interesting to note the importance which the bank has attached to the evaluation of internal control.

Three examples may serve to describe the nature of the differences in accounting principles. The Central Bank intends to require a note to the financial statements explaining the time period used for current and noncurrent assets and liabilities if the period used exceeds 180 days.

A separate paragraph of the principles sets the 180 day period as the general rule while acknowledging that there may be exceptions depending on the company's operating cycle. The 180 day rule arises

from an earlier Central Bank requirement and is frequently adhered to in Brazil. The 180 day term might suggest an overstatement of net working capital as a result of including all accounts receivable and inventories in current assets while including in current liabilities only that portion of long-term debt payable within six months. The countervailing argument is that inventories may very well be classified as both current and noncurrent and that the 180 day rule is no more arbitrary than the one year yardstick commonly applied in United States practice. In any event, the uniform treatment and disclosure in Brazil should avoid misleading the reader concerning the current and noncurrent items.

The Central Bank draft principles include several other specific limitations related to receivables and intangibles. For example, the principles permit deferral of organization and start-up expenses provided they do not exceed, in total, 10 percent of capital stock and are amortized annually over a period not to exceed five years. The 10 percent limitation arises from Brazilian corporate law and the five-year provision is based on the allowable period for deduction under Brazilian corporate income tax. The critic might argue that the five-year write off is arbitrary and the 10 percent rule may encourage companies to defer costs which do not benefit the years to which deferred — particularly operating losses incurred during the initial period of manufacturing. The Brazilian accountant will argue that the five-year write off maximum is conservative and the 10 percent limitation will not permit deferral of operating losses when properly interpreted by the professional practitioner.

Finally, the Central Bank has included a principle which relates to Brazilian procedures used to recognize monetary correction. The principle requires that stock dividends received from associated, subsidiary or dependent companies as a result of capital increases based on the monetary correction of fixed assets or capitalization of the working capital reserve shall be recorded at their par value. The bank will require that such amounts be credited to a separate stockholder's equity account and be maintained therein until capitalized as part of the company's stock. The distribution of such amounts as cash dividends will not be acceptable and the bank recommends that they not be used to offset losses. This principle arises from a requirement in Brazil that corporations periodically revalue assets to recognize the effect of inflation and that the increments of revaluation be distributed as stock dividends. The principle requires that the recipient record the divi-

dends at par in the investment account and capital surplus. The recommendation that the amounts not be used to offset losses appears to be tantamount to a denial inasmuch as the Central Bank will require registrants to obtain the prior approval of the bank before offsetting losses in this manner.

TECHNICAL ASSISTANCE

The accounting principles and auditing standards which will be officially recognized in Brazil should have an immediate impact on the profession in that practitioners will seek interpretations and refinements. Hopefully, the new institute will soon be prepared to respond to the demand and organize something comparable to the Accounting Principles Board. But one major stumbling block must be recognized: the accounting profession, taken as a whole, is not well organized, disciplined, or discriminatory in terms of competence. The minimum set represents the beginning of a long process in the upgrading of the accounting profession in Brazil. AID's $15 million loan includes a $2.5 million technical assistance component. The specifics of the program to be financed with these funds have not been finalized but, in general, the technical assistance plan anticipates the following:

(1) Short-term courses in accounting and auditing will be offered to approximately 500 practicing accountants, with each course to be taught in part by visiting professors from the United States.

(2) Short-term courses will be offered to Brazilian University-level instructors in areas related to Capital Market development.

(3) Financial analysts, financial managers, and officials of the stock exchanges and financial institutions will be offered specialized courses designed for their needs.

(4) Conferences and seminars will be sponsored for the purpose of bringing together Brazilian and foreign professionals associated with the various aspects of Brazilian and international Capital Markets.

(5) Finally, equipment and materials will be provided as required by educational groups for use in courses and conferences related to the continuing development of the Capital Markets.

It seems likely that a technical assistance program in auditing and accounting will be initiated sometime later this year. If properly designed, the program should benefit individual practitioners and supplement the in-house training currently being provided by the major public accounting firms. It is equally important that the benefits of

this program reach accountants now working in industry, in financial institutions, and in government.

CONCLUSION

The Central Bank of Brazil has taken the initial steps needed to permit the accounting profession to develop self-regulation. Accountants will play an active, essential role in the launching of FUMCAP. A successful FUMCAP will: encourage the firm offer underwritings of new issues of securities; create a bond market which will permit issuing companies to better finance long-term requirements; and introduce significant regulatory measures which will promote investor confidence and participation.

Accounting and Economic Development in Latin America

EDWARD L. ELLIOTT*

The Inter-American Accounting Conference is scheduled to be held from November 19-25, 1972, in Punta del Este, Uruguay. One of the themes to be discussed at this meeting is the "Role of the Public Accountant in Economic Development." I see no reason for limiting economic development activities to public accountants and, therefore, this article will deal with "Role of the Accountant in Economic Development." My emphasis, will be on Latin America; however, I believe that many of the ideas included in this article can be applied to developing areas in general.

When speaking of Latin America, one must consider the differences among nations. The area is not monolithic. Sufficient similarities exist, however, to combine the nations into one unit for purposes of this paper.

* Edward L. Elliott is associate professor of accountancy in the College of Commerce and Business Administration at the University of Illinois at Urbana-Champaign. He has a Ph.D. degree from the University of Illinois at Urbana-Champaign. In 1960-61, he worked in the cost accounting department of Creole Petroleum Corporation, Maracaibo, Venezuela. In 1965-66, he served as director for economics and business administration at the University of Guayaquil, Ecuador, and set up a School of Business Administration and Accounting in 1966. During 1966, he was an economic advisor to the government of Ecuador under a USAID contract, and he worked directly with the minister of finance on budgeting, accounting, and fiscal policy. In 1966-67, he was economic advisor to the Dominican Republic under a USAID contract with duties similar to those in Ecuador. In 1968-70 Professor Elliott served as chief of party of the University of Illinois/USAID Contract Team in Tunisia and was instrumental in the creation of the Institut Superieur de Gestion.

Prior to the 1930s the economies of the Latin American nations were outward-directed. This outward–directed development resulted from the interpretation of the international division of labor theory which according to Raúl Prébisch, a noted Latin American economist, relegated Latin America to the "production of food and raw materials for the great industrial centers."[1]

The depression of the 1930s created serious export earnings problems for Latin America and started the chain of events which led to emphasis on an inward-directed development. This movement was accentuated by World War II.

It should be noted that the industrialization which took place as a result of the aforementioned events was imposed on Latin America. The nations had to find substitutes for the imports which, during the depression, could not be purchased because of the decline in exports and, which during World War II were not available because of the war efforts in the industrialized nations. Thus, in addition to the natural industrialization which would have taken place because of cost advantages, this type of forced industrialization also had to be undertaken.

Today, manufacturing accounts for 24.6 percent of the region's gross domestic product (GDP) as compared to 16.3 percent for agriculture. In terms of employment, however, 43 percent of the labor force is employed by agriculture while only 15 percent is absorbed by the manufacturing sector.[2] This has important implications for the type of investment which should be undertaken if economic and social progress is to be obtained.

The United Nations has proclaimed the 1970s as the Second Development Decade during which the governments of developing nations are expected to undertake programs for the purpose of accelerating economic expansion and social progress. The United Nations' statement calls for an average annual rate of growth in the GDP of 6 percent in the first half of the decade. This rate of growth should increase to 7 percent by the end of the period. The figures for the increase in per capita income are 3.5 percent and 4.5 percent respectively.[3]

Economic and social progress, however, will not be forthcoming unless limited resources are used efficiently. For example, a recent

[1] Economic Commission for Latin America, *Development Problems in Latin America* (Austin: The University of Texas Press, 1970), p. 6.

[2] Inter-American Development Bank, *Socio-Economic Progress in Latin America* (Washington, D.C.: Inter-American Development Bank, 1970), pp. 6, 12-13.

[3] Ibid., p. 5.

article on Brazil in the Wall Street Journal stated that "when a salt company bought new equipment efficiency soared — but 7,000 people lost their jobs."[4] I believe that in this and similar cases the benefits resulting from the increased efficiency of the modernization should be compared against the costs of unemployment if the twin goals of economic expansion and social progress are to be obtained. Furthermore, the accountant should be involved in this type of analysis.

The same article in discussing investment in Brazil's northeast region states:

> As the biggest spur to investment in the area, the government waives up to half of a corporation's income tax obligation if the company invests the funds in approved Northeast development projects....
>
> The projects are expected to create 11,000 jobs directly and 41,000 jobs indirectly, government officials say.[5]

The expectations, however, have been grossly overstated as can be seen from the following:

> Recife, which is 1,100 miles from Rio de Janeiro, is so remote from big markets that most industries can make money only by selling their products locally. Yet most of the local people don't have enough money to buy. Result: factory after factory operates at only a fraction of capacity.
>
> For instance, Ford Motor Co. assembles only thirteen little "Rural" station wagons a day at its Recife plant. The plant is so uneconomic that management is considering using it to make something else such as uniforms for workers in the big Ford plants in Sao Paulo. Simply for lack of customers, General Electric Co.'s light bulb factory here is also doing poorly. Yet because of the tax breaks many plants will be able to operate this way forever.
>
> A German businessman observes: "After all, if building a plant in Recife were such a good investment, the government wouldn't have to offer such liberal incentives." Israel Klabin, head of Brazil's largest paper company (which has invested in the region), adds: "We have produced an underdeveloped, highly industrialized region."[6]

Again, one observes the inefficient use of limited economic resources. In this case neither economic expansion nor social progress has been forthcoming. This indicates that the planning process at the aggregate level could be improved.

In the past, accountants have not been involved in the planning process at the macrolevel. Planning at this level has been left to economists. However, by his experience in the business world, the ac-

[4] "Turnabout Nation," *The Wall Street Journal,* April 21, 1972, p. 1.
[5] Ibid., p. 25.
[6] Ibid., p. 25.

countant is uniquely qualified to assist government in all stages of the planning process. Traditionally, he has participated mainly at the project level in the private sector. I believe that he should extend his scope and become involved at the sectoral and aggregate levels of the planning process. This extension of the accountant's activities could have implications at the educational level.

An interesting fact is that although manufacturing (24.6 percent) has surpassed agriculture (16.3 percent) in terms of its contribution to the GDP, agriculture, in the majority of countries, still accounts for over 50 percent of export earnings.[7] From 1966-69 the Dominican Republic and Honduras depended on agriculture for 80 percent of their export earnings. The corresponding figure for Argentina, Ecuador, and Uruguay was 90 percent. Only in Chile (copper), Trinidad and Tobago (petroleum), and Venezuela (petroleum) did agriculture account for less than 10 percent of export earnings.[8] Primary commodities, however, accounted for the major part of foreign exchange earnings. Only 14.3 percent of export earnings was derived from the export of manufactured and semi-manufactured articles.[9]

The above statistics reveal that activities in the manufacturing sector are chiefly import-substitution oriented. Effective demand, however, is lacking and consequently the manufacturing sector has not developed to its fullest extent. With 6 percent of the world's population, Latin America accounts for only 3 percent of the world's industrial output.[10] One can, therefore, understand the desires of Latin Americans to increase industrial output both for local consumption and for exports.

To increase manufacturing activities, however, requires the availability of foreign exchange since most of the equipment and technology required for the industrial sector must be imported. As stated previously, basic commodities still account for 85.7 percent of export earnings in Latin America. In terms of purchasing power, during the period from 1965-68 the value of the world's exports of manufactures increased on the average by 11.2 percent per annum while the value of basic commodities increased by only 3.7 percent per year over the same period.[11]

---

[7] Inter-American Development Bank, *op. cit.,* p. 7.
[8] Ibid.
[9] Ibid., p. 22.
[10] Economic Commission for Latin America, *The Process of Industrial Development in Latin America* (New York: United Nations, 1966), p. 2.
[11] Inter-American Development Bank, *op. cit.,* p. 23.

In the foreseeable future exports of basic commodities will continue to provide the major portion of foreign exchange for the region.[12] This sector of the economy, traditionally neglected by accountants, should receive increasing attention in the future. Prébisch, in referring to agricultural development has stated:

Perhaps in no other field is the development economist so liable to be involuntarily caught up in the dangerous generalizations such as those relating to agrarian reform, the technological revolution — "the green revolution," as is now the fashionable term —, the need to improve diet, and other matters of unquestionable importance. Systematic repetition of these generalizations does little to further our acquaintance with something so diverse, so multiform as agriculture in Latin America. Nor will the perfecting of econometric exercises help us much, until more progress is made towards a thorough knowledge of the agricultural situation.[13]

In his opinion what is needed is "new research which will gradually fill the present wide gap between macroeconomic estimates and a number of microanalyses of specific problems."[14] He suggests that "it is necessary for agricultural experts and development economists to join forces in pressing on from the aforesaid generalized approach to systematic factual analysis."[15]

Unfortunately he neglected to consider the useful services which accountants can perform in providing the "factual analysis" which he deems vital for the development of the agricultural sector.

Additionally, if the desired rate of growth is to be obtained in the Second Development Decade, the industrial sector will also have to expand. The accountant can play an important role in these efforts. He should be a member of the team which will undertake the desired technological and economic feasibility studies and should be responsible for preparing the different budgets and pro-forma statements which are necessary for judging the possible success of the proposed undertaking. These documents can also provide information to prospective investors.

The work in this area will depend to a large extent on estimates since in developing countries industrial statistics will not generally be available. All costs should be broken down into the domestic and foreign exchange components so that the balance of payments effects may be

[12] Ibid.
[13] Raúl Prébisch, *Change and Development: Latin America's Greatest Task* (Washington, DC.: Inter-American Development Bank, 1970), p. 84.
[14] Ibid.
[15] Ibid.

calculated. Moreover, special considerations should be taken to ensure that working capital provisions are adequately provided for, since one frequently finds that these are not considered in the project's requirements.

So far, the comments have concentrated on accounting for domestic investments. Domestic financing, which in the past decade has provided 91 percent of the total increase in investment in Latin America,[16] will in the 1970s continue to fall short of total regional investment needs. Consequently, foreign investment will continue to be used in the region.

Latin America, however, has serious balance of payments difficulties which according to many Latin Americans, right or wrong, are caused by the repatriation of profits on foreign investments. A recent study states that "the offsetting of capital flows by service payments is particularly acute in the case of Latin America. In 1966 the World Bank estimates that debt service on private loans exceeded new lending by nearly 20 percent. Total debt services on both public and private debt exceeded loans by 61 million."[17] These statistics indicate that there is a net outflow of foreign exchange from the area.

Another report prepared for the Council for Latin America, Inc. revealed that during the period 1965-68 new United States private investment in Latin America averaged 700 million a year while earnings on total United States investment in the region amounted to 1.440 million a year.[18]

Latin Americans are concerned about this economic dependence and there are historical reasons for this attitude which has been conditioned by statements such as the following:

> I helped make Mexico safe for American oil interests in 1914. I helped make Haiti and Cuba a decent place (sic) for the National City Bank boys to collect revenue in. I helped purify Nicaragua for the international banking house of Brown Brothers . . . I brought light to the Dominican Republic for American sugar interests in 1916. I helped make Honduras "right" for American fruit companies in 1903. Looking back on it, I might have given Al Capone a few hints.[19]
>
> Maj. Gen. Smedley D. Butler, USMC, 1931

---

[16] Inter-American Development Bank, *op. cit.*, p. 43.

[17] Charles R. Frank, Jr., *Debt and Terms of Aid* (Washington, D.C.: Overseas Development Council, 1970), p. 26.

[18] Herbert K. May, *The Effects of United States and Other Foreign Investment in Latin America* (New York: Council of the Americas, 1971), p. 1.

[19] "Dollar Diplomacy 1972 Style," *Newsweek*, April 10, 1972, p. 80.

On the other hand consider the following statement:

> Before World War I the U. S. was dependent on European capital for its development and eager to end that dependence . . . "No self-respecting nation can or should accept the proposition that it should always be economically dependent upon another nation."[20]
>
> Richard M. Nixon, April 1972

However, after 150 years of political independence Latin America still finds itself in a state of economic dependence and recently has started to reconsider its economic state of affairs. Two recent documents concerning the role of foreign investment in the development of Latin America reflect the desires of Latin Americans in this area. These documents produced in 1969 are familiarly referred to as the "Consensus of Viña del Mar" and the OAS Trinidad Document. The essence of these documents is as follows:

1. Latin Americans would like to be independent from outside forces. The OAS Trinidad document states: "Development would be neither authentic nor politically acceptable if international cooperation were to contribute to perpetuation of the financial and technological inferiority of Latin American countries."[21]
2. Latin Americans no longer favor the establishment of one hundred percent foreign owned subsidiaries.[22]
3. Latin Americans do not want foreign investors to utilize local resources as the main source of financing operations.[23]

As a means of coping with the last mentioned problem, limits on borrowing from local financial institutions have recently been imposed in several Latin American nations. Moreover, extension of this practice can be contemplated.

> In the last three years four countries — Brazil, Mexico, Peru, and Venezuela — have done something about this, attempting to force foreign firms to bring more funds from abroad and give national firms a larger share of local credit resources. Mexico's restriction has been to limit in two stages bank's lending to foreign-owned companies, so that now loans outstanding to such firms cannot exceed 90% of the year-end 1967 level. In Venezuela, as long as foreign firms are in debt to local banks they cannot reduce their own capital plus reserves and foreign credits below the level of June 1969. Peru

[20] "Canada: Getting Through It," *Newsweek,* April 24, 1972, p. 39.
[21] Business International Corporation, *Nationalism in Latin America* (New York: Business International Corporation, 1970), p. 21.
[22] Ibid., p. 22.
[23] Ibid., p. 23.

has various restrictions that have reduced funds available to a select group of foreign firms by 50%, slowed down the processing of loans for most other foreign firms, and set a global limit (2 billion soles in 1970) on local bank credit to all companies that are 60% or more foreign-owned. In Brazil, access to special credit sources like BNDE has been virtually closed to foreign-controlled firms, and all financial institutions are required to earmark 50% of their loans for firms majority-owned by Brazilians. Chile is currently considering a tax penalty to be paid on local borrowings by foreign-controlled enterprises.[24]

If this regulation is to be enforced, the accountant can be useful in performing the attest function.

The desire of Latin Americans to avoid 100 percent foreign ownership is closely linked to the first point which stresses independence from outside forces. In order to accomplish these ends, demands for an increasing participation by local investors, both private and governmental, can be expected. In many cases direct investment by foreign firms in selected sectors of the economy will be prohibited. The following quotation is indicative of what can be expected in the 70s.

Almost everywhere, foreign control of public utilities is a thing of the past. Such investments face eventual expropriation because inflexible rate structures tend to pit private companies that want some profit against governments that recognize higher rates as politically explosive. As a corollary, manufacturing activities that lie close to the center of public concern — for example, the pharmaceutical industry for reasons of public health — will face great pressure on prices, followed by demands for less brand competition.

Extractive industries will remain a sensitive area, although the huge capital outlays and marketing requirements needed will tend to limit outright expropriation. Instead there will be pressure for state equity participation as high as local treasuries permit.[25]

Demands for participation in the extractive industry are already a part of the contemporary economic scene. The following appeared in April 25, 1972 issue of the *Wall Street Journal:*

Standard Oil Co. (New Jersey) is optimistic Western oil companies will reach a "mutually profitable" agreement with Mideast governments on proposed sale to those nations of 20 percent interests in oil operations on their soil, George T. Piercy, senior vice-president, told the Boston Society of Security Analysts.

But Mr. Piercy, a veteran Mideast negotiator, said "wide differences exist" in the prices to be paid for the assets, and he believes the negotiations won't

[24] Ibid., p. 12.
[25] Ibid., pp. 16-17.

be completed until about the end of the year. The governments have set a deadline of late June.[26]

To ensure an equitable agreement the services of the accountant can again be beneficially utilized.

In an effort to provide mutually acceptable solutions to the dilemma of foreign investment, several formulas have been proposed. The fade out formula calls for a gradual acquisition of foreign control by local interests over an agreed upon period of time. Either partial or complete acquisition may be agreed upon but, in its present form, the fade out formula advocates the retention of a 20 percent minority interest by foreign investors so that the foreign company will remain interested in providing managerial and technical assistance.

Management services contracts are also being emphasized. Under this arrangement foreign investors will build and manage enterprises, receiving as compensation a percentage of profits and foreign exchange saved.[27]

One can visualize the numerous financial problems which will arise under these types of arrangements. Formidable as they may seem, however, they are not invincible and the accountant must be prepared to render his services in this area.

In this paper the Latin American viewpoint has been presented. There are two sides to all arguments, however, but where differences exist suitable agreements can be reached where opposing forces bargain on more or less equal terms.

To summarize, I believe that the accountant should participate at all levels in the process of economic development. In this paper emphasis has been placed on his role in the private sector. This role has been divided into: (1) accounting for locally owned businesses in the agricultural as well as the industrial sector, and (2) accounting for dealing with foreign investments.

Challenges exist in both areas. I hope that accountants will respond to them.

---

[26] "Oil Man Sees Firms in West Reaching Pact with Mideast Nations," *The Wall Street Journal,* April 25, 1972, p. 16.

[27] Business International Corporation, *op. cit.,* pp. 23-24.

An Appeal for Unity in Establishing Financial Accounting Standards

MICHAEL N. CHETKOVICH*

Accountants in other countries may be surprised at the heated debates and divided viewpoints that in recent times have engulfed accounting in this country. Often these differences have centered on specific issues of accounting for a particular matter, but underneath there has been a questioning of the processes by which accounting principles and standards are determined and the choice of valuation and measurement concepts. These differences suggest a lack of agreement or understanding as to what the objectives of accounting should be.

In the United States we have had a protracted period of debate and division. From this there now has arisen recommendations for fundamental change. We must choose carefully the path we should follow and must then unite in this course, if we are to succeed.

---

* Michael N. Chetkovich is the managing partner of Haskins & Sells. He is a CPA and is licensed in California, New York, and several other states. Mr. Chetkovich holds bachelor's and master's degrees from the University of California (Berkeley) and is a member of Beta Gamma Sigma, Beta Alpha Psi, and Phi Beta Kappa. He is also a member of the American Institute of Certified Public Accountants, the California Society of Certified Public Accountants, the American Accounting Association, and the Institute of Internal Auditors. Mr. Chetkovich has had extensive audit experience, serving as managing partner of the San Francisco office of Haskins & Sells prior to becoming the managing partner of that firm. He is a member of the International Relations Committee of the American Institute of Certified Public Accountants. This paper was presented at the International Seminar on Accounting on April 28, 1972, at Urbana, Illinois.

THE CONTROVERSIES

In the fall of 1970 the simmering discontent in the United States over matters of accounting principles suddenly boiled over. Two major accounting firms demanded that significant changes be made in the Accounting Principles Board, or else they would consider withdrawing their support of that body. A third firm suggested it was time that the structure and operations of the board be carefully studied. There was also a proposal before the American Accounting Association that it create its own principles-establishing body. In January 1971, Marshall Armstrong, then president of the American Institute of Certified Public Accountants, called a special meeting of representatives of twenty-one of the larger public accounting firms to consider what action should be taken. As a representative of Haskins & Sells, I attended this meeting, which was held in Washington, D.C.

That meeting was the genesis of two distinguished study groups — the Study on Establishment of Accounting Principles, informally called The Wheat Committee," after its chairman, Frank Wheat, a practicing attorney and former commissioner of the Securities and Exchange Commission (SEC), and the Accounting Objectives Study Group, whose chairman is Bob Trueblood of Touche Ross & Co. Their assignments were related. The Wheat Committee was to study the organization and people aspects of the problem of establishing accounting principles; the Objectives Committee was to study and identify the underlying concepts.

The interdisciplinary approach taken in these two studies is unique and commendable. In each group, a minority of the members were accounting practitioners. The groups also included educators in both accounting and economics, financial executives, an attorney, an investment banker, and a financial analyst. The formation and the composition of these study groups seemed to offer a positive and promising approach to the problems at hand.

While these groups have been at work, the controversies over accounting principles have continued to accelerate. As examples of our hot issues, we have accounting for oil and gas exploration costs, marketable securities, the investment credit, and leases. In what is now history and, sadly, precedent, some of those who disagreed with the APB on accounting for the investment credit took their case to Congress and won. Congress stipulated the accounting in the law. Now others apparently are trying the same approach on other issues. For example, there recently has been a letter-writing campaign on the

subject of accounting for leases. Many of the letters received by congressmen were virtually identical, though signed by different individuals from different states. As a result of these letters, a number of congressmen have written to the board. All this, without even the issuance of an exposure draft!

Today the prime issue is not how we account for leases or marketable securities or the investment credit. It is whether or not we will be able to agree on a logical process for the development of financial accounting standards. If we cannot, much of what we presently have in accounting and in the profession may be lost. If we cannot agree within the United States, what hope is there for developing common international standards? If we can unite, there is the opportunity to make substantial progress both here and abroad. The recommendations of the Wheat Committee, submitted a month ago, may be like the rainbow at the end of a storm — the promise of a better future.

THE REPORT OF THE WHEAT COMMITTEE

I consider the report of the Wheat Committee to be outstanding — both in terms of its analysis of the issues and in the recommendations made. As a dividend, the report is written in a remarkably clear and informative style. Since it was issued only four weeks ago, some of you may not have had a chance to read it. When you do, you will find that there is no need to struggle to understand its meaning.

The members of the Wheat Committee viewed their charge broadly. They evaluated the APB in terms of research, output, status, and authority. They considered whether this function would be handled better by the government. They recognized the difficulties encountered in developing principles — the search, without much success, for basic concepts that would guide, if not determine, the choice of accounting procedures and rules. They saw that despite the years of dedicated effort by the most competent of accountants, most of the job still remained to be done.

I agree with this distinguished committee's analysis of the issues. Last fall, when we were preparing our firm's proposal to the Wheat Committee, I met with a number of my partners, including Emmett Harrington, who was then an APB member, and Oscar Gellein, who currently serves on that body. At that time the four hot issues mentioned earlier had not developed to their full intensity. Nevertheless, it seemed obvious to us that the APB was experiencing serious difficulties. Criticism of the board — from all segments of the financial

community and the profession — had reached a point where it was increasingly difficult, if not impossible, for it to act. Despite the best of intentions, dedication, and effort, conditions were such as to inhibit effective performance.

This criticism, whether justified or not, seemed to point to several conclusions:

First, the appearance of independence is as important as the fact of independence.

Second, a broader basis of participation is needed. Presently, all eighteen board members must be CPAs, though four are not practitioners. As a consequence, the financial community and the public tend to view the establishment of accounting principles as "the CPAs' ball game."

Third, the process needs to be more efficient. Although the APB has increased the number of meeting days a year from two in 1960 to twenty-seven in 1971, the backlog of matters requiring action continues to increase.

Fourth, the research program, despite the efforts of a number of dedicated and competent individuals, has not met the needs of the board. When the APB was established, it was thought that its primary activity would be to review and approve the results of research performed for it. This has not been the case. Although there has been some effective research, some has been too late, and some has been ignored.

With what appears to be a rather common view of the problems, it was not surprising that the Wheat Committee's recommendations coincide closely with the conclusions in our proposal in a number of significant respects. Both call for the formation of a new foundation. Within this foundation, both recommend that the task of developing accounting principles (the Wheat Committee suggests these are better named, "Financial Accounting Standards") would be carried on by a seven-member, full-time board, and three members would not necessarily be CPAs; however, they would be required to have a thorough understanding of financial reporting.

As mentioned earlier, the Wheat Committee was made up of distinguished men. There can be no question about the depth and sincerity of their convictions. Therefore, the fact that their report was unanimous is significant.

Their recommendations call for fundamental changes to the existing order. If adopted, the American Institute of Certified Public Ac-

countants will no longer set the standards of financial accounting; likewise, individual firms no longer will be represented on the board. This is a bold course. It has my wholehearted support.

The Wheat Committee's recommendations have now been endorsed by the Financial Executives Institute, the American Accounting Association, the Board of Directors of the American Institute (of which Professor Bedford from the University of Illinois at Urbana-Champaign is a member), Commissioner Needham of the SEC (who also happens to be a CPA), and five of the so-called Big Eight public accounting firms. Next Monday, the report will be presented to the members of Council of the American Institute. The position they take will be a decisive factor.*

It is to be hoped that the Wheat Committee recommendations can be accepted and implemented as quickly as possible. To that end, the American Institute's Board of Directors has already appointed an ad hoc implementation committee. Much needs to be done: legal questions require research and resolution; qualifications for trustees need to be determined; financial backing needs to be obtained.

The Wheat Committee Report discussed financing but refrained from making specific recommendations. It is important that the trustees establish a financial policy that will assure that the activities of the foundation are not adversely affected by the methods of financing. The following would be desirable guides for such a policy:

1. Contributions should be broadly-based, in keeping with the spirit of a broadly-based Financial Accounting Standards Board. This means that significant financial support should come from outside the accounting profession.

2. No one individual, firm, or company should contribute a disproportionate amount. This is especially true of contributions from publicly-held companies where the motives for large contributions might be suspect.

3. All contributions should be disclosed publicly.

4. Initially, the foundation should seek pledges to fully support its activities for a five-year period. This would strengthen the trustees' ability to obtain members for the Financial Accounting Standards Board as well as researchers and other staff. Potential employees understandably are concerned about financial support for a new organi-

* On May 2, 1972, the council approved, by nearly unanimous vote, the recommendations of the Wheat Committee.

zation. Furthermore, the five-year period provides reasonable time for gaining public acceptance.

THE ACCOUNTING OBJECTIVES STUDY GROUP

Now that the Wheat Committee has completed its work and its recommendations are being considered, more attention will be focused on the other study — the Accounting Objectives Study Group, or what is becoming known as the "Trueblood Committee." Its charge was to refine the objectives of accounting and to seek criteria for solving vexing measurement and reporting problems. Incidentally, its initial timetable was for eighteen months, while the Wheat Committee's was for six.

With the public hearings being held in New York on May 15-17, the Study Group is nearing completion of its fact-finding phase. I understand the study group has made a thorough search of the literature, has conducted interviews with prominent representatives of those groups who prepare or use financial information, and has had group meetings with many concerned organizations of wide-ranging interests, including lawyers, consumer advocates, corporate executives, and representatives of stock exchanges and government agencies. I am told that the study group has received numerous written expressions of views ranging from letters covering a particular aspect of the problem to impressive presentations, or so-called white papers, extensive in scope and depth. Papers from other countries have been received as well, an indication of international interest.

The scope of this input is testimony to the major effort being made. The direction of this effort — to seek information from all classes of users of accounting information — and the subject matter referred to in the study group's releases — forecasts, fair values, social costs, user needs, disaggregation of data (to name a few) — testify to the breadth of the study.

Given this broad scope, the interdisciplinary nature of the effort, and the compresensive search for ideas, what can we expect as results?

Past experience tells us that we should not expect quick and far-reaching solutions. Thirteen years ago the Accounting Principles Board was formed. Then the notion of a grand design — namely postulates, principles, and rules — was in vogue. Because so much was expected, the subsequent disappointment over lack of, or delay in, solutions was greater than it needed to be. We in the United States

are too often impatient and expect too much. Let us in this instance be hopeful but realistic in our expectations.

Putting that note of caution aside, one can see real opportunities for making substantial progress on a number of fronts. This is not a group of accountants speaking only to accountants. This is an interdisciplinary approach bound to provide some new insights. For the first time there will be a thorough, systematic study of financial information needs of diverse users. A statement of these needs should be immensely valuable.

It is hoped that the Accounting Objectives Study Group will speak both to short-range and long-range objectives and to the transition processes needed to go from one to the other. The short-range goals should be the basis for many of the initial priorities of the proposed Financial Accounting Standards Board. A statement of objectives, when applied to current accounting practices, should point to areas for improvement. For example, one vexing area has been those accounting conventions that at times seem to frustrate public goals, such as the misuse and one-sidedness of censervatism.

Hopefully, we have learned that the evolutionary path is the only way to progress. We must learn to progress while maintaining a high level of continuity.

APB Statement Number 4 describes the "qualitative objectives" of accounting — relevance, understandability, verifiability, neutrality, timeliness, comparability, and completeness. Can we make these concepts operationally significant? Can we deal with potential trade-offs between these concepts? Which are more primary, more central to accounting? Are there others? Are there surrogates?

The study group must consider the question: "What should be the role of accounting in society today?" With the proposed sharing of responsibility for determining financial accounting standards, it is critical to develop a consensus of what this proper role is.

Hopefully, the study group will point the way toward a new level of performance which will include more complete and meaningful disclosure, more relevant measurements, and more timely response to questionable accounting innovations.

INTERNATIONAL OBJECTIVES AND STANDARDS

This approach to resolving matters of accounting standards should provide significant insights into the development of international

standards. It is reasonable to expect that accountants in other countries will be able to benefit for our experiences and thereby avoid some of the difficulties we have had. If the Accounting Objectives Study Group is successful, its work may be the model for similar studies in other countries. But this does not mean that results of such studies in other countries necessarily will be similar to results here. Accounting is fundamentally a social institution; it provides not only a basis of measurement, but also a method of controlling activities within an enterprise. As a result, in each country accounting should develop in a manner relevant to the society in which it exists.

It would make sense that we seek to define international accounting objectives before we attempt to define international accounting standards. Common objectives must necessarily derive from social and economic environments that are similar and thus create similar needs. Today the trend of accounting in the various nations has both encouraging and discouraging factors in relation to the eventual establishment of international accounting objectives. On balance, I am optimistic.

Many companies, both here and abroad, have become multinational. Each of us daily is using products from other continents, as well as from our neighbors in North America. The same would be true of our counterparts in other land. The continuing success of the European Common Market is also a strong incentive for defining international accounting objectives.

The discouraging factors (in developing international objectives and standards) are the continuing strong influence of nationalism and, in the underdeveloped countries, a lack of qualified accountants needed to establish a strong accounting profession. Nationalism is essentially an isolationist concept. It limits effective communication; it tends to reject the experiences of others for the preference of "going it alone."

By starting with a study of international accounting objectives, we will have the basis for developing international accounting standards. We must, however, recognize that different environments will cause different accounting objectives and, therefore, different standards. For example, price-level adjusted financial statements are accepted as necessary in some countries that have been ravaged by inflation for years. Countries that do not have a severe problem of inflation may well reject price-level accounting as artificial and unnecessary. Another example is that in Brazil the ownership of companies is represented by bearer certificates. Without the knowledge of who the shareholder is,

there is not the same incentive to develop concepts of disclosure and shareholders' rights to knowledge. Another situation is the differing income tax laws of various countries. They usually have a pervasive, sometimes overriding, influence on local accounting standards. These three examples illustrate some of the different environmental factors that affect accounting.

In spite of the differences I have mentioned, the growth of multinational trade and business is continuing. Clearly there is a growing need to develop international objectives and standards of accounting.

The task is not easy. It will not happen overnight. Probably the best approach will be to seek commonality of accounting objectives and standards among the developed nations with like social environments. Gradually, these objectives and standards could be adopted in other countries as their situations permit.

A NEED FOR UNITY

The Wheat Committee Report notes that "the recent past has been marked by contention approaching rancor among those . . . involved in the financial reporting process." The Committee members advise that "such a state of affairs cannot continue. Either the contending forces . . . find common ground for cooperation or the opportunity to cooperate will be lost." The members believe that acceptance of their recommendations would mark a new spirit of accommodation arising from a common need.

I cannot present this message any more clearly. We must have unity and cooperation. If we do, the problems we have will be solved and progress will be rapid. We will be able to provide leadership in seeking common international objectives and standards of accounting.

This is a time for wisdom, courage, and action responsive to the needs of today and the years ahead. I am confident that we have the ability as accountants and the theory, knowledge, and discipline we call accounting to do the job society expects of us.

Income Tax Administration in Great Britain

JAMES O. WINJUM*

This paper describes the general administration of income taxes in Great Britain and in particular focuses on the respective roles played by the local tax inspector and the independent chartered accountant in the assessment of income taxes. Contrary to the belief of many, the British do not have an audited tax return — the tax inspector does not rely on the chartered accountant to quite that extent — but the degree of reliance of the tax inspector on the audit work performed by the C.A. is much greater than in the United States. The situation in Great Britain at this time can be summarized as follows: There is no audited tax return but the audit is an integral part of the tax return.

The British Income Tax is a temporary tax; it has been ever since 1799. It was introduced at that time by William Pitt to help finance the Napoleonic Wars. Abandoned in 1815, it was reintroduced by Robert Peel in 1842 as a temporary measure to finance his free trade policy. This temporary measure is now a permanent part of the

* James O. Winjum received his B.B.A. degree in 1959, and his M.S. degree in 1961 from the University of Minnesota. He received his Ph.D. from the University of Illinois at Urbana-Champaign in 1970. He holds a CPA certificate from Wisconsin and is a member of Beta Alpha Psi, Beta Gamma Sigma, the American Accounting Association, and the American Institute of Certified Public Accountants. Dr. Winjum has worked in public accounting, and has also taught accounting at the University of Minnesota, Wisconsin State University and the University of Illinois. He is currently on the staff of the Graduate School of Business Administration at the University of Michigan. Dr. Winjum's manuscript, "Accounting in Its Age of Stagnation," won the 1970 American Accounting Association Manuscript Contest and his monograph, *The Role of Accounting in the Economic Development of England 1500-1750,* was published by this Center.

British tax structure but it must still be reimposed each year by an Act of Parliament. This is accomplished through the enactment of the annual Finance Act. There is a provision in each Finance Act that that act should be construed as one with the Taxes Acts and it is these acts which are considered to determine the statutory tax law. The Income and Corporation Taxes Act of 1970 is currently the principal act charging income and corporation tax, and it is this act, together with the annual Finance Acts and any other acts as related to income tax or capital gains, that are known collectively as the Taxes Acts.

At the same time that the tax law was consolidated in the Income and Corporation Taxes Act 1970, the administrative provisions of the tax law were consolidated in a separate act, the Taxes Management Act (TMA) 1970. This act contains the main provisions concerning the administrative and procedural matters involved in implementing the Taxes Acts in Great Britain.

The act begins by placing the income tax, corporation tax, and capital gains tax under the care and management of the Commissioners of Inland Revenue, thereafter referred to in the act as "the Board." The Chief Inspector's Branch is by far the largest unit of the Inland Revenue and is responsible for ascertaining liability to income, corporation and capital gains tax. Since the British system does not operate on a self-assessment basis, the chief inspector's branch is not only responsible for agreeing to the taxable income of corporations and other taxpayers, but it must also calculate and notify the taxpayers of their tax liability for the year. In addition, the department operates an immense and ambitious tax withholding program for the Schedule E taxpayer called P.A.Y.E. (Pay As You Earn) which employs the greater part of the branch staff. The actual collection of the assessed taxes is a separate function handled by the Collection Division.

The administration of income taxes in Great Britain has always been decentralized. Originally the administration of this tax was carried out in each locality by selected local businessmen and landowners. These men, called general commissioners, were responsible for the assessment and collection of income taxes in their own area. The primary responsibility of the Crown's representative, the local surveyor, was to see that the system functioned smoothly and that the government received its fair share of tax revenue. Gradually over the years the local surveyor in each area assumed more of the executive functions, including the determination of individual tax liabilities, although the actual assessments still were made, at least formally, by the local com-

missioners. The Income Tax Management Act 1964, confirming a practice already long in existence, formally made the assessment of income taxes the statutory responsibility of the tax inspector.

Because of this decentralization the central organization of the chief inspector's branch is relatively small. It exists primarily to insure that the local district offices have sufficient technical guidance on complicated tax questions and that these offices are efficiently and, within reason, uniformly administering the taxes acts in their local districts. The actual assessment of income tax, corporation tax, and capital gains tax is carried out in some 750 local district offices.

Each district is in the charge of a district inspector who holds the rank of inspector, higher grade, or above. He is responsible to the chief inspector of taxes, and through him to the board, for the efficient administration of his district and, except for the controls necessary to ensure a reasonable level of consistency, he is given virtually complete independence in the discharge of his duties. In the important area of agreeing Schedule D trading income for corporations and individuals, he has complete authority regardless of the amount involved. He is truly in charge. His management responsibilities are expected to take somewhere between one-quarter and one-third of his time; the remainder is devoted to personal technical work in which he deals with the complex tax problems of his district including the examination of accounts and determination of assessable income for the major companies in his area.

At the present time there are approximately 1,800 fully trained tax inspectors to settle tax liabilities in the 750 districts, an average of little more than two per district. Since only the fully trained inspector can assess the profits of corporations, this means that these 1,800 inspectors are responsible for determining the tax liabilities of 315,700[1] companies with total assessable profits of £4,711,100,000,[2] an average of roughly 175 companies per inspector. In addition, they are responsible, along with the 2,543 inspectors with modified training, for assessing the trading profits of some 1,915,500[3] business and professional men with total assessable profits of £2,330,900,000.[4] Presumably it was the type of figures and calculations outlined above which prompted Dr. John Gilbert, Member of Parliament from Dudley, to state in a

[1] Table 50, *Inland Revenue Statistics 1971* (London: Her Majesty's Stationery Office, 1971), p. 61.
[2] Table 49, Ibid., p. 60.
[3] Table 37, Ibid., p. 48.
[4] Table 29, Ibid., p. 40.

House of Commons debate that he understood "that an inspector may expect to examine about 1,000 trader's accounts in a year."[5] Although these figures are only averages, they do give some rough idea of the magnitude of the accounts work facing the fully trained tax inspector.

This reliance on the ability of the district inspector to efficiently administer a forty to fifty man office while personally settling the major tax liabilities in his district and overseeing and approving the settlement of the minor ones by his staff — all on a hopefully fair and amicable basis — is the keystone of the administration of the Income Tax Acts. The policy of decentralization and delegation is essential to the system as it is presently constituted. One of the primary threats to this system seems to be the increasing tendency, especially under times of stress such as the period following the massive tax legislation of 1965, for the district inspector to turn to the head office for help. Each local district must be able to solve its own problems if the present system is to function efficiently.

Perhaps a brief description of the actual assessment process and the respective roles played by the chartered accountant and the tax inspector in it, will serve to illustrate this decentralization. Income or corporation tax on the profits of trade or professions (Schedule D, Cases I and II) in Great Britain does not operate on what is known in the United States as a self-assessment system. Under the British system the taxpayer is required only to make a return of his taxable income; he does not have to calculate his actual tax liability, nor does he have to make any payments until he has been legally assessed to tax by the District Inspector. Once he has submitted his computation of taxable income he may assume a completely passive attitude towards his tax assessment, waiting for the district office to calculate his tax bill for the year of assessment and notify him of his tax liability. If he accepts this assessment, his only action need be the payment of his tax on the due date.

In most instances, however, the taxpayer (or his agent) will take a much greater interest in the assessment process than the passive role outlined above. The process of assessing taxes often becomes one of negotiating taxes with the taxpayer becoming a very active participant in the determination of his tax liability. The final amount may be agreed upon only after heavy and perhaps prolonged discussion on debatable points of tax law, accountancy, or fact. If either party is not

[5] Great Britain, Parliamentary Debates — House of Commons, Fifth Series, Vol. 808 (December 7-18, 1970), p. 103.

satisfied with the final assessment, he has recourse to an appeal system which may not terminate until the case is heard in the highest court in the land, the House of Lords. Incidentally, the tax inspector in addition to all his other duties, represents the Inland Revenue in the tax courts — at least at the lower levels.

The tax assessment process for the taxpayer whose accounting year is the calendar year can be expected to proceed as follows. The first step is the issuance of the tax return forms to the taxpayer shortly after the commencement of the income tax year (April 6 for individuals and April 1 for corporations). These return forms call for the taxpayer to submit the calculation of his taxable income within approximately a sixty to ninety day period, but are not enforced too rigidly. The Inland Revenue is precluded from officially making any tax assessments on these calculations until the current Finance Bill becomes law, which usually occurs about the first week in August. The tax returns and associated schedules are submitted by the taxpayer in July and August, queries raised by the inspector are answered and questionable items are negotiated during early autumn, the final figure is agreed to by December 1, and the tax is paid on January 1.

This is the ideal scenario. If the final assessment is delayed, which it often is, by work pressures on either the accountant or the inspector or by their failure to agree on questionable items, the inspector raises a provisional assessment which the taxpayer then appeals, agreeing to pay an amount on January 1 for up to say 80 percent of the estimated final tax bill. Settlement of the remaining 20 percent often takes a year or longer. The performance of the district inspector is gauged at the home office primarily by an analysis of arrears of work on hand such as the amount of unanswered correspondence or the number of assessments under appeal rather than by any indicators of the amount of taxes assessed.

The TMA 1970 requires that the return of income submitted by the taxpayer be computed in accordance with the Taxes Acts. These acts provide that "income tax shall be charged . . . on the full amount of the profits or gains of the year preceding the year of assessment,"[6] but do not specifically define these terms. Revenue practice and numerous judicial decisions have established that, except in those instances where there is a direct conflict with statutory law, "profits and

[6] *Income and Corporation Taxes Act 1970* (London: Her Majesty's Stationery Office), Section 115 (1).

gains must be ascertained on ordinary principles of commercial trading."[7]

The Taxes Acts do not identify the expenditures that are deductible in arriving at taxable income, but they do contain provisions specifically prohibiting the deduction of certain expenditures. Since the approach of the statutes is to prohibit rather than permit, the courts have held that all expenditures not expressly prohibited by statute are deductible in arriving at taxable income if their deduction can be justified on the basis of business or accounting principles. Expenses are therefore permitted to be offset against revenue in computing taxable income only if they are not expressly prohibited by statute or they would be allowed under the ordinary principles of commercial accounting.

This direct relationship between trading and taxable income is reflected in the nature and composition of the tax return submitted by the British taxpayer. The complete return starts with copies of the firm's audited financial statements for the year of assessment, includes a computation, starting with the financial income, of the firm's taxable trading income for the year, and finishes with the formal tax return itself listing all sources of the taxpayer's income on a schedule by schedule basis. Sufficient explanatory schedules are also included to enable the inspector to analyze the accounts. Since the Companies Act 1967 requires that all corporation accounts be audited, the audit certificate is also included in the return and is relied on to a very large degree by the tax inspector as evidence of the veracity of the statements.

In fact the tax audit so familiar to the United States corporate taxpayer is unheard of in Great Britain. The tax inspector may ask for additional information in order to determine if an item is indeed a legitimate tax deduction, but he relies on the company or its chartered accountant to supply this information. The inspector may query, for example, the breakdown between capital expenditures and ordinary repairs as reflected in the statements to ascertain that it is appropriate for tax purposes, but he would not question the total amount. He would also expect this additional information to be supplied to him by the company at his request.

Most tax inspectors have never visited the plants or offices of the taxpayers in their district. They are not trained as auditors and they rely almost completely on the audit certificate of the independent char-

[7] Report of Tax Cases (V.III) (London: His Majesty's Stationery Office, 1899), p. 189.

tered accountant as evidence that the accounts submitted to them are a fair presentation of the facts. The tax inspector examines the submitted statements and schedules, asks for additional information, negotiates and compromises on questionable items with the taxpayer or his representative, and agrees on the final tax assessment without leaving his office. This is why one tax inspector may settle the tax liabilities of over 100 companies in one year.

It is interesting to note the role of the chartered accountant in this system. His role as independent attestor ends with his signing of the audit certificate. If he is also retained by his client to prepare and negotiate the client's tax return, he performs this function under his role as a tax expert, not as an independent accountant. At this stage he becomes an advocate for his client and the fact that he is also an independent verifier of financial information does not add any additional credibility to the tax return. At this stage it is only his expertise in the tax field that is valued and relied on by his client and the tax inspector.

In fact many of the larger firms in Great Britain have their own staff of tax experts who assume full responsibility for the calculation and settlement of their firms' taxes. They still base their calculations on the accounting information contained in the audited financial statements but beyond that they act independently. Even under these circumstances the audit certificate still accompanies the tax return and is relied on by the tax inspector as evidence of the basic integrity of the statements.

Obviously there must be a great deal of cooperation between the accountants and tax inspectors in Great Britain for this system to work. Their working relationship is based on mutual reliance and trust. The rogue accountant is soon discovered and, as one inspector commented, "can be very speedily put out of the tax business." When pressed to describe how this system can work in practice, a chartered accountant regarded me quizzically and asked, "Do you play cricket, my boy?" When I answered in the negative he replied, "Ah, then you will never understand us."

The obvious question that arises is how much tax revenue is lost to the government through this system of reliance and trust. Most authorities agree that there is some loss of tax revenue — a loss which they emphasize would be extremely difficult to measure — but they do not feel that it is significant when weighed against the additional costs — both monetary and social, such as the invasion of privacy — that would result from a more aggressive attitude towards tax assessment

by the Inland Revenue. Most of the people that I interviewed felt that a system under which the Inland Revenue duplicated much of the work already performed by the chartered accountant would not only be wasteful, but also extremely damaging to the morale of the public accounting profession.

Many authorities in the United States have suggested from time to time that we should adopt a system of audited tax returns. The British system does not go quite that far. The tax inspector is still free to question the computation of taxable income as submitted to him and he often does. In fact he regards himself as having a great deal more expertise in tax matters than the typical accountant and he does not hesitate to challenge the accountant in this area. On the other hand, he acknowledges that the accountant has a greater degree of expertise in accounting and is willing to rely on the accountant's work, thus avoiding a great deal of the duplication of audit effort that takes place in this country. The day of the complete audited tax return is still a long way off and may never be achieved, but we could make at least a start towards that goal by emulating the British in their reliance on the work done by the independent accounting profession.

An International View of Accounting and Disclosure

GERHARD G. MUELLER*

Had Kenneth Boulding written this paper, he would surely have managed to use the phrase "uncongenital twins" in the title. His classic essay comparing accounting with economics established clearly that the two disciplines should be very much alike but are not. It is not a question of one becoming a substitute for the other, but rather a matter of mutual complement.

The same holds for accounting and disclosure. They should be much better twins than in fact they are. This paper seeks to demonstrate that a major international trend toward increased financial disclosure has developed since the mid-1960s, and that disclosure improvements offer more hope for financial reporting during the 1970s than advances in accounting development.

AS THE 1960s BEGAN

My dissertation research in the late 1950s concerned accounting and financial reporting in Western Europe. It was a depressing affair

* Gerhard G. Mueller, Ph.D., CPA, is professor of accounting and chairman of the Department of Accounting at the School of Business Administration at the University of Washington. He is also the director of International Accounting Studies Institute of that University. For 1970-71 he was academic vice-president of the American Accounting Association and a past chairman of its Committee on International Accounting. Professor Mueller is the author of *International Accounting,* and co-editor of *Readings in International Accounting* and *Accounting: A Book of Readings.* He has authored a series of monographs on accounting practices in various countries, contributed sections to other monographs and handbooks, and published articles in professional journals in the United States and abroad.

for a rather starry-eyed and idealistic graduate student, especially one with a personal background in Europe. Continental accounting thought and theory were well established at that time and had good academic reputations. One can easily assert that there were very few Dutch university students in economics, sociology, or political science who were not fairly well acquainted with the well-known Netherlands accountant-economist, Professor Th. Limperg. Their counterparts in Germany were equally well at home with the writings of Professor E. Schmalenbach.

On the other hand, financial reporting and disclosure were generally in a sad state of virtual non-existence. United Kingdom Professor Harold Rose came right to the point in his well-known 1965 monograph on disclosure. He observed "The general position of the law in most continental countries is that financial statements do not have to be circulated to shareholders; the consolidation of group accountants is nowhere obligatory in the EEC and is rarely practiced outside Germany. . . . Retention of undisclosed reserves is the rule. . . . Continental law is rarely explicit in definition and seldom allows adequate comparability either between companies or between different periods of time."[1]

Tales of woe abounded. Montecatini, the big Italian chemical concern, began selling securities in the United States and hence had to meet Securities and Exchange Commission requirements in its financial reports to United States shareholders. Yet it did not issue similar reports in Italy. Italian shareholders received their information — usually late — from Italian newspapers, which in turn copied them from American financial services.[2]

The West German financial community was suspicious but unaware of the enormous control which large German banks exercised over many large German companies whose shares were publicly traded. The three top West German banks completely controlled a long list of department stores, shipping firms, and breweries and owned big blocks of shares in such enterprises as the auto giant Daimler-Benz AG and the mining and chemical complex, Gelsenkirchner Bergwerke. On top of it, the Deutche Bank AG was later reported to have interests of 25 percent or more in no less than twenty-three other German

[1] Harold Rose, *Disclosure in Company Accounts* (London: Institute of Economic Affairs, Ltd., 1965), p. 24.

[2] "The Inside Dope: European Nations Push Laws Compelling Firms to Disclose More Data," *Wall Street Journal,* November 30, 1966, pp. 1, 13.

banks. This was completely unknown to anyone but a few corporate directors in West Germany as the 1960s began.

Other industrial countries outside the United States were in equally bad shape. The secretiveness surrounding financial affairs of French companies was legendary. Michelin, the French tire manufacturer, prided itself on the fact that no one except its president really knew the company's financial position and profitability. Swiss law, born in the anti-Depression mood of 1934, actually encourages companies (this is still the case today) to maintain hidden reserves "in order to insure the stability of business enterprise and the continuation of dividends." Examples of Swedish inventory and investment reserves puzzled analysts, and even the relatively more open British financial reporting standards tolerated almost no details concerning results of operations. For example, one large British television electronics company, Pye of Cambridge, Ltd., eventually had to admit that "for a long period" certain income received from an affiliated company in Ireland had been credited to a private account whose existence was unknown even to the parent company's auditors. Out of this account "certain payments had been made."[3]

Elsewhere, like in Japan and South America, the situation was bleaker still. Companies simply felt that their financial affairs were entirely private and that no reporting obligations of any type existed. To be sure, they filed some statutory reports. As a general rule, however, these reports were largely unadjusted and unaudited trial-balance-type figures.

Let us also not forget the situation in the United States twelve years ago. Even though Rose had commented in his study that "disclosure in the United States appears to enable investors to make a more confident choice between firms in the same trade and to assess more accurately the quality of management,"[4] Congress ordered a special study of the SEC to examine problems and practices in the securities industry in the United States. As we all know, a five-volume report resulted. While this report found no major shortcomings in the operations of the American securities markets, it did find room for improved corporate disclosures.

Of special interest was a survey conducted in connection with the special study. A selected sample of companies who had sold stock to the

[3] Ibid.

[4] Rose, op. cit., p. 29.

public in 1965 were asked to submit copies of all financial reports sent to their stockholders in the year 1961. Seven hundred seventy-one companies either submitted such reports or else answered that they had not provided stockholders with any financial information. Based on these responses, it was determined that more than 25 percent of the respondents did not distribute any financial information to stockholders at all. Financial data distributed by the rest of the respondents contained deficiencies like failure to classify inventories (4 percent), failure to state method of pricing inventories (26 percent), failure to include explanatory notes with financial statements (33 percent), and failure to have financial statements audited (23 percent).[5]

The report on the special study of the SEC also pointed out that:

> Almost half of the approximately 300 public complaint letters received by the principal office of the Commission in an average month in 1961, for instance, were from investors whose complaints were that they either could not obtain information about a company in which they had invested or that the information sent to them was inadequate.[6]

The findings of the special study did lead to the 1964 amendments to the United States Securities Acts upon which we will comment further. Parenthetically, though, we might note that Eldon Schafer has studied the relationship between corporation laws in the various states of the United States and the SEC-type financial reporting requirements and concluded convincingly that state corporation laws are ineffective in matters of financial disclosure without stringent filing, review and enforcement procedures. Schafer feels that disclosure legislation at the Federal level appears to be the only effective way to insure continuing progress in matters of financial disclosure.[7]

Twelve years ago, then, the picture was anything but rosy in financial reporting and disclosure. Moreover, the term "disclosure" was not even a part of the work-a-day vocabulary of many accountants and members of the financial community in many countries. In turn, there was little public confidence in corporate financial affairs, and broad public securities markets existed only in the United States, the United Kingdom, and Canada. However, there were also enormous pressures

---

[5] Surendra S. Singhvi, "Corporate Financial Disclosure in the United States," *Mississippi Valley Journal of Business and Economics* (Fall 1969), pp. 48-49.

[6] U.S. Congress, House, *Report of Special Study of Securities Markets of the Securities and Exchange Commission,* 88th Congress, 1st sess., 1963, Part III, p. 10.

[7] Eldon Schafer, "Impact of State Disclosure Requirements on Annual Reports of Unlisted Companies," submitted for publication.

upon the accounting fraternity to put their respective houses in better order.

THE START OF THE INTERNATIONAL DISCLOSURE BANDWAGON CIRCA 1965

Quite suddenly, and without fanfare, major changes in disclosure requirements began to appear during the early 1960s. By 1964, the United States had enacted the first major revision of federal securities legislation in thirty years — most of it designed to afford additional disclosure to creditors and investors as well as to extend disclosure requirements to companies not heretofore covered.

The story was much the same in many other countries. New companies legislation with heavy emphasis on new and extended disclosure requirements was brought about in highly industrialized countries like Germany, Japan, and the United Kingdom; in developing countries like Brazil, Israel, and Mexico; and in France, where no major change in companies law had occurred since 1867.

Accounting literature published in the United States did not give much play to the international disclosure bandwagon which was really gathering steam toward the end of the 1960s. Possibly United States accountants were too concerned with their own affairs. Still, occasional news items did sketch the situation. For instance, the July-August 1966 issue of *The Lybrand Newsletter* carried a five-page news article entitled "Trend to Increased Financial Disclosure in International Accounting Could Have Important Long-Range Effects on Capital Market." The story began with the following paragraph:

> The legislatures of the United Kingdom, Belgium, and Italy are each considering proposed legislation which would substantially increase corporate financial disclosure requirements. Whatever the outcome of the particular proposals, they have added impetus to an *international trend* to broader disclosure set in motion last year by Germany, France and Brazil. Germany enacted sweeping changes in its corporation law beginning this year and taking full effect in 1967. France decreed substantially more detailed reporting and greater power for registered auditors, effective this year. Brazil granted authority to the National Monetary Council to prescribe rules for balance sheet presentation, uniform accounting procedures and reports to be submitted by independent registered auditors. (Emphasis added.)

The motives for these widespread increases in disclosure requirements were rather complex and seem to have differed from nation to nation. Overall, it seems fair to say that low level investor confidence was a major consideration in each case. European and Far Eastern stock markets were narrow and inflexible. Investable funds accumu-

lated in the developing countries were seldom invested at home. One might speculate that the disclosure bandwagon was set in motion as a response to the needs of users of accounting information rather than as an innovation brought about by accountants themselves. If this thesis is correct (and certainly much more study would be needed before one could reach a more definite conclusion), it might well add additional support for Professor Maurice Moonitz's contention that major accounting innovations and developments have seldom been produced directly by accountants.

Let us see how the editors of *Fortune* (February 1966) analyzed the trend toward much greater financial disclosure in many countries:

> One reason for the trend is the increasingly international outlook of business. Many American corporations have listed their shares on European exchanges and published annual reports in several languages. The comparisons this brings about has been embarrassing to European firms. The most important motivation comes from the growing awareness of European companies that secrecy today is self-defeating. Because of it, share ownership has been effectively limited to an elite group. The swelling numbers of affluent middle-class investors buy fixed-interest securities or simply put their money in savings accounts instead of stocks. Corporations have in effect been bypassing the vast pool of capital. But they can no longer ignore it because their need for equity capital to meet research costs and to expand production facilities have been rapidly increasing.

One might argue that the disclosure developments of the 1960s helped to make possible the Eurodollar international securities market, as well as greatly expanded stock exchange activities in Germany and Japan. As far as the writer is aware, there have been few, if any, effective opposition movements beyond some individual company cases here and there. In other words, the bandwagon is still a going concern.

DIFFERENT PATHS TOWARD GREATER DISCLOSURE

We pointed out earlier that modes of achieving better and more financial disclosure differed from country to country. To illustrate this, a few situations are described specifically even though in summarized form. The reader should keep in mind that despite the different routes utilized for arriving at higher disclosure plateaus, the outcome (i.e., the disclosure rules and requirements instituted) brought about a fair degree of international similarity. It appears that it is much easier, internationally, to evolve comparable standards of financial disclosure be-

tween different countries than it is to evolve accounting principles that are in harmony with one another.

Germany

During the immediate post-World War II era, Germany's accounting and financial reporting was guided by the provisions of her 1937 Corporation Act, which contained a curious mixture of reactions to Depression fears and Nazi-type disregard for the interests of the public. There was virtually no disclosure under it. For instance, two or three-line income statements were common — with the first item on such statements resembling a gross margin figure but really being merely a balance of certain specified accounts. This state of affairs was not conducive to easy availability of financial information.

As a consequence, the West German Federal Ministry of Justice completed a draft of a new corporation act in 1958. Their approach was essentially to deal with income statement matters in one act and balance sheet matters in a later act. Despite considerable opposition, and only after combining the respective bill with tax legislation which eliminated income taxes on stock dividends, the first part of the new German companies legislation became law on January 31, 1960. Its biggest breakthrough was that net sales had to be reported specifically, that income or loss from pooling agreements had to be specified, and that certain other items relating to taxes, and some income and expense categories had to be reported without fail. Thus a first major disclosure step came about in 1960.

On September 6, 1965, the loop was closed when the West German Bundestag passed its new Corporation Act which incorporated the 1960 legislation dealing with income statements. Better financial reporting and better protection of stockholders were the two main objectives of the new legislation. These objectives were accomplished primarily by requiring preparation and publication of consolidated financial statements, greatly expanded audit requirements and responsibilities of independent auditors, plus changes in certain accounting measurement techniques. Regarding the latter, for instance, most opportunities to use so-called hidden reserves were eliminated. For another instance, it was stipulated that goodwill must be amortized over a period not exceeding five years.

While the details need not concern us here, we should note that some sharp reactions were evoked by some of the new stipulations.

For example, the disclosure requirement for profit-and-loss pooling transfers and for consolidated financial statements caused a number of companies in Germany, particularly companies owned 100 percent by large multinational enterprises based outside the country, to change their legal form of organization from a corporation (aktiengesellschaft) to a closely held private company (Gesellschaft mit beschränkter Haftung). Switches of this type were one way to escape the information and disclosure demands laid down in the new act. Parenthetically, a number of German affiliates of large United States corporations were the first to make this type of switch.

In the end, though, the disclosure advocates prevailed. Great similarity now exists between disclosure requirements in West Germany and those of the United States SEC. The two-step complete change from prior law proved to be the right combination for the German situation.

United States

The breakthrough of new financial disclosure requirements during the 1960s was not as spectacular in the United States as it was in Germany. Nevertheless, the United States case is of particular interest from an international perspective.

Since the special study of the SEC was introduced earlier, we only need to refresh our memories to the extent that the big new financial disclosure even for the 1960s came in the United States via the 1964 amendments to the Securities Acts, and these amendments did not change the basic nature of disclosure in the United States but rather extended it to all companies which have $1 million in gross assets or 500 or more shareholders of record for any one class of equity securities. The size limits brought many medium-size companies under SEC jurisdiction, even though these companies had not necessarily undertaken active public offerings of their securities.

Falling under the coverage of these amendments somewhat by accident were quite a few foreign companies which, because of one reason or another, had acquired more than 500 United States shareholders. For example, a number of Canadian companies fell into this category. They had never sold securities in the United States, had never actively encouraged trading of their securities in the United States markets, yet found that for one reason or another American citizens had acquired their shares. Americans living in Canada might have made investments in their securities, United States citizens may have found them

attractive in the light of prevailing price or market conditions, or some United States brokers may have actually recommended the stock on a comparative advantage basis. In any case, rather unintentionally, many large Canadian companies had acquired sizeable numbers of United States shareholders.

When it became clear that the new SEC requirements were to be extended to all companies falling within the established limits, irrespective of company nationality, charges of extraterritorial infringement were lodged vigorously in Canada, the United Kingdom, Germany, Japan and elsewhere.[8] Canada was the first to seek redress through political and diplomatic channels. The SEC responded with exemptions for affected foreign companies for a stipulated period of time so that the problem could be studied further.

But at the same time the SEC asked foreign companies whose equity securities were held by 300 or more residents of the United States to "voluntarily" furnish certain minimum information about their financial affairs. While the SEC clearly did not have (nor does it now have) jurisdiction over foreign companies, it made it clear that those companies domiciled outside the United States which were affected by the new requirements and which did not "voluntarily" furnish a stipulated minimum of financial information would be included on a "blacklist" which was to be published openly. This caused a British writer to observe:

> Directors should note that once such a blacklist has been published, brokers and dealers executing securities purchase orders will be expected to disclose to their customers the fact that a company has failed to furnish to the SEC the requested information for public inspection. In addition, directors should realize that the Securities Acts provide criminal penalties for their willful violation which include large fines, or lengthy imprisonment, or both, and empower the SEC to bring injunction and other proceedings in the United States federal courts to enforce compliance.[9]

As it turned out, most foreign companies with 300 or more United States resident shareholders did voluntarily supply the financial information requested by the SEC. As far as this writer is aware, those companies ending up on the blacklist did not suffer grievously. International securities markets probably moved a little closer to one another as a consequence of the whole episode. More important, though, a

[8] "Those Nosey Americans," *Economist,* February 12, 1966, p. 642.

[9] S. L. Highleyman. "A Caveat for Companies with U.S. Shareholders," *The Chartered Secretary* (October 1966), p. 402.

principle was established that a regulatory agency of one country could exact certain financial disclosure requirements from corporate citizens of other countries. Technically, this was the first official step toward internationalizing financial disclosure.

Japan

The Japanese approach to better financial disclosure is probably the most novel for the period under consideration. Being a code law country, Japan ended World War II with a highly detailed and deeply entrenched Commercial Code reminiscent of German and French counterparts and first enacted in 1890 (first statutory financial statements required in 1899). This code and its administration continues to be under jurisdiction of the Japanese Ministry of Justice.

United States administrative influence in Japan after the termination of World War II apparently produced the curious conclusion that effective modern financial reporting and disclosure could not be achieved within the confines of the existing Commercial Code. Someone wisely judged that the basic Commercial Code structure was incompatible with effective disclosure goals.

Thus, in 1948, a Japanese Securities Exchange Law was passed which made financial disclosure a matter separate from companies legislation. It also created an independent auditing (CPA) profession. To make sure that Commercial Code requirements did not get into the way of the new Securities Exchange Law requirements, the latter were assigned to the Finance Ministry for administration and further development.

With the basic machinery so established, 1963 saw a revision of the Commercial Code and new Ministry of Justice regulations for the preparation of financial statements. At the same time, the Finance Ministry began revising its Securities Exchange regulations for the preparation of financial statements as required by it. With the growth of indigenous securities markets in Japan and rapid development of the Japanese CPA profession — both of these falling under Finance Ministry jurisdiction — major new official opinions and regulations were issued in 1967 dealing with disclosure in general and consolidated financial statements in particular. A fully new era of financial reporting dawned in Japan through Finance Ministry efforts based on Securities Exchange legislation.[10]

---

[10] Gerhard G. Mueller and Hiroshi Yoshida, "Securities Exchange Law Requirements" in *Accounting Practices in Japan* (Seattle: International Accounting Studies Institute, University of Washington, 1968), pp. 30-34.

Presently, Japanese companies still have two sets of statutory accounting and reporting regulations to worry about, namely those of the Commercial Code and those of the Securities Exchange Law. They must prepare periodic financial reports (semiannual under Commercial Code rules) in simultaneous satisfaction of both of these requirements. While the code continues with its creditor and current financial position orientation, the Securities Exchange regulations stress independent auditing and disclosure together with an orientation toward current and prospective investors. Judging from the importance that many Japanese companies, especially the larger companies, attribute to the Securities Exchange regulations coming from the Finance Ministry, it seems reasonable to assert that the battle for disclosure has been won in Japan and that the mid-1960s were the turning point in the rather ingenious confrontation between the accounting and financial reporting requirements of two Cabinet-level ministries.

United Kingdom

Britain has probably the most effective system of companies legislation because she has managed to keep this legislation current and in full service of the business community. The 1844 "Act for the Registration, Incorporation, and Regulation of Joint Stock Companies" began the modern era of successive United Kingdom companies acts. The 1844 legislation was followed by the Companies Act 1855 and yet another act in 1856. The Acts of 1862 and 1867 were superseded by the Companies Act 1879 and thereupon the Companies Act 1900. After that, we have the Companies Act 1907, and a Consolidation Act in 1908. World War I interrupted things so that the next act was written into law in 1928. Following that, the Companies Act 1948 came about with its most recent successor dated 1967. The British experience stands as a monument to the assertion that legislatively based regulation can be kept current and can actually lead rather than stifle.

The foregoing somewhat lengthy excursion into the history of British companies legislation serves to point out that the Companies Act 1967 was not something unusual or unexpected in the United Kingdom. However, despite its routine timing and routine processes of change, it is important to us because its single most significant accounting-related feature is a giant step forward in financial disclosure.

Perhaps it is best to let another author make an evaluation for us of the latest British companies legislation. Here is Professor Eldon Hendriksen's 1969 observation about it:

With the full implementation of the 1967 Companies Act, financial reporting in Great Britain will have taken a considerable step forward in the disclosure of relevant information for use by creditors and investors and the general public. Not only is there an attempt to meet the needs of these specific users of financial reports but it also attempts to meet social and economic goals by requiring public disclosure of the financial activities of all firms (with very few exceptions) that take advantage of limited liability.

The extensions of disclosure requirements include the reporting of current valuations in certain circumstances, the clarification of accounting procedures, the reporting of revenues as net income before tax by major classes of business, and the presentation of information relevant to a prediction of future cash flows such as the presentation of planned capital expenditures and the terms for the repayment of debt. There is little doubt that this reflects an increasing awareness in Great Britain of the social responsibilities of business firms. On the other hand, many firms look on these requirements as a usurpation of their prerogative to maintain a tradition of secrecy of business activities and to maintain a competitive position. Some firms will, no doubt, choose to give up their limited liability and become unlimited companies rather than disclose their activities. In the long run, however, many firms may come to recognize this extension of disclosure requirements as an advantage because it should permit better informed investors and creditors which may very likely improve the viability of private enterprise in a socialistically oriented society.[11]

It cannot be denied that the latest British Companies Act is significantly concerned with disclosure. Moreover, as Professor Hendriksen so accurately reported, from personal and first-hand study directly in the United Kingdom, many of the new British disclosure rules seem to have social and economic rather than accounting goals. This could well be a harbinger of things to come elsewhere, since new social and environmental goals for accounting are expressed not only at this conference but at many of its current counterparts as well as in much of the current literature in the field. Could it be that disclosure is pointing the way for accounting as it seems to have done in Britain?

Canada

Somewhat late in the game but still noteworthy for yet another approach are the amendments to the Canada Corporations Act which were introduced in Ottawa in May 1969, first read in the Canadian House of Commons in October 1969, and passed into law later that year. While a number of issues were dealt with in these amendments — like insider trading rules, remuneration of directors and offi-

[11] Eldon S. Hendriksen, "Disclosure — Insights Into Requirements in the United Kingdom," *International Journal of Accounting* (Spring 1969), pp. 31-32.

cers, possible restriction of shareholders to Canadian residents or citizens, etc. — the most important element dealt with compulsory disclosure rules. Basically these new rules require that every private and public company must mail a copy of both the financial statements and auditors' report to each shareholder not less than fourteen days and not more than thirty days prior to an annual meeting. The same documents need to be filed officially by all public companies and also by private companies whose gross revenues or assets are in excess of $3 million Canadian dollars.[12] For disclosure purposes, the gross revenues and assets of any company with which a private company is affiliated are included in the private company's gross revenues and assets. This meant, among other things, that many United States-owned Canadian companies had to commence public reporting of their financial affairs even though they were private (i.e., closely held) companies.

Compared with the new United States and British disclosure rules sketched earlier, the Canadian requirements are not all that novel. What is interesting in the Canadian situation, however, is the fact that these new rules apply only to Canadian companies incorporated under federal laws. In 1969 there were only about 17,500 such companies.[13] Hence the majority of Canadian companies is incorporated under the laws of one of the ten Canadian provinces.

Since provincial law, and especially that of the highly industrialized province of Ontario, often patterns itself after the federal Canada Corporations Act, the broadened Canadian disclosure rules for private concerns were expected to trickle down quickly to all Canadian companies. In other words, the Canadian situation is one wherein the federal law often serves as the standard bearer and model for much more widely used provincial law. Therefore, a goal of considerably widened financial disclosure was attacked by specific assault on the top of the pyramid first.

It appears quite evident that the Canadian scheme has direct application to regional groupings like the European Common Market countries or some of the developing countries located in close geographic proximity of one another. Changes in financial disclosure patterns might possibly lend themselves to some follow-the-leader psy-

[12] Ernst & Ernst, *Special Bulletin,* International Business Series, October 21, 1969, p. 1. The dollar amount of this limit has been altered somewhat since the 1969 enactment of the law referred to.

[13] "Canada Acts to Broaden Disclosure Rules to Private Concerns, Units of U.S. Firms," *Wall Street Journal,* May 23, 1969, p. 8.

chology — more so than the development of generally accepted accounting principles. I suggest that some of our behavioral science-oriented colleagues might find it challenging and useful to devote some research attention to this proposition.

EXPECTATIONS FOR THE 1970s

My prognosis for accounting and financial reporting developments during the 1970s is rather simple — it is the well-worn dictum that the past is prologue. It is my theme that there will be few new major accounting developments during the 1970s, but there will be substantial innovative reporting and disclosure advances. Accountants and accounting-related regulatory agencies discovered during the 1960s that important advances were possible via the disclosure vehicle. There is every indication, it seems, that the existing thrust is likely to continue.

For one thing, accountants are as success-oriented as any other group of individuals. Observation quickly convinces that the new disclosure efforts initiated during the 1960s were not only successful, but highly successful. Hence it stands to reason that these efforts (i.e., the success model) are likely to be repeated and elaborated. Even if only the existing momentum were carried forward, new progress could and would be made.

A second reason underpinning the earlier assertion that disclosure during the 1970s will continue to be the main-line activity in accounting is the nature of these two forces. Disclosure holds relatively little emotional content for accountants (even though it might hold quite a bit of such content for businessmen, bankers, and others who think that a certain degree of business secrecy is an essential ingredient of our competitive system), whereas strict accounting is laden with emotions. Simply stated, disclosure is considerably less controversial than accounting.

There are natural disagreements over such issues as product-line reporting or who should be given proprietary responsibility over the preparation and issuance of financial statements. However, such debates pale when compared to controversial accounting issues like greater use of current values in making accounting measurements, the conceptual merit of the pooling-of-interests technique in accounting for business combinations, or the treatment of foreign exchange translation differentials when the exchange value of the dollar changes its long-time direction from appreciation in relation to other curren-

cies to decreasing exchange equivalents. Many different analytical tools are usually brought to bear upon accounting controversies — including purely abstract reasoning from axioms and assumptions, simulations of business events in laboratories or through electronic computer programs, empirical or environmental research which is essentially inductive, or certain special-purpose analysis techniques borrowed from other disciplines like economics, law, or the behavioral sciences.

In contrast, disclosure is essentially a policy issue. No deep analysis is needed to keep it respectable. It is not taught as a separate field of study in our colleges and universities because it has little intellectual content of its own. Yet this is precisely why it is so much less controversial and therefore so much more easily dealt with.

Third is the impression that changes in disclosure requirements are more easily implemented than changes in accounting requirements. The main difference between disclosure and accounting is that the latter has considerable involvement in measurements whereas the former does not. Measurements in turn affect directly and often materially how economic events are reported to others. Each and every change in an accounting measurement technique affects different units throughout a society, from individuals or households to huge industrial corporations or governmental agencies. On the other hand, a change in a disclosure routine does not require changes in myriad complicated measurement systems. Hence it is more easily tolerated and usually readily implemented if its merit is persuasive or the authority of a respective policy maker clearly recognized.

Finally, it would appear that certain preconditions now exist in the accounting environment which point more toward new disclosure developments rather than new accounting developments. One such precondition is the long-debated question of international accounting standards. New international accounting meetings make their appearances with great regularity — with the Jerusalem Conference and the World Seminar in Turin having been added late in 1971 to an already large array of such meetings. Greater harmonization or standardization of accounting principles is urged at each and every one of them. At the same time, such standardization seems impossible at present. There is no international instrumentality which could enforce such standards even if they could be evolved and agreed upon. Moreover, it is increasingly clear that a single set of accounting standards and practices might not serve equally well in every known political, social, legal, and

economic system. Thus, efforts to standardize accounting have met with much frustration.

Yet this same frustration has smoothened takeoff for better financial disclosure. One can disclose and "be with it" while still holding on to one's own particular configuration of accounting principles. Also, one can work toward greater international harmony in disclosure (and thereby contribute to the intellectually appealing international standards issue) without inviting some type of enforced international accounting uniformity which is appealing to only a few. Disclosure, then, might well be the solution to the international accounting dilemma.

The preconditions for even greater movement in the direction of more disclosure during the 1970s seem most noticeable in Europe. As Britain prepares to join the European Economic Community countries, her focus on Europe will become even greater. In turn, this will surely accelerate harmonization of all types of activities, including accounting. Disclosure, let us recall again, is a vehicle whereby one can harmonize without giving up one's own particular accounting structure.

Moreover, greater strength and unity within the EEC increase the likelihood of an eventual creation of a "European company." This would be a stateless company incorporated directly under the Treaty of Rome and paying its taxes to the European Parliament. Work on drafting a companies law which would become the basis for a "European company" has been in process since the late 1950s. Since most of the details of this proposal were evolved during the 1960s, it is not surprising that the accounting requirements suggested rely most heavily on disclosure.[14]

The other noteworthy precondition is the European capital market which received its start as the Eurodollar market. This market for corporate and public agency securities has grown spectacularly over the past five years, and there is every indication of even further growth. From an accounting point of view, we can readily recognize that financial reporting must have been an integral feature of this expansion, as indeed it was. Yet Commerce Clearing House does not publish a weighty "European Accounting Principles" set of paperbacks. No board, agency, or commission was empowered to manufacture accounting principles for the new European capital market.

Accountants, lawyers, and other writers active in this European market quickly found a way out — disclosure! Completely privately,

[14] A. T. McLean, "Societas Europea — A Consideration of the Proposals for the European Company," *Accountant's Magazine* (December 1971), pp. 631-40.

and on their own, they evolved a format for an "offering circular" which looks very much like a United States SEC prospectus. In one sense these circulars married, let us say, Swedish accounting principles and financial statement formats with financial disclosure levels of the United States SEC type. The important role of disclosure in this process seems clear. Since the process worked in Europe, it might not be entirely foolhardy to speculate that before much longer the United States SEC might accept financial statements from foreign registrants wishing to enter the United States securities markets based on accounting principles prevailing in the registrant's own country, so long as a high level of financial disclosure is also present.

In summary, I cannot see major new accounting developments during the 1970s but I can see continued strong growth of the importance of accounting throughout organized society and the net social benefits provided by those who work in the discipline. The greater role for accounting will occur primarily in Europe and the Far East where industrialization is proceeding at a rapid pace and where the already existing needs for accounting services far outweigh available supplies. Better and more disclosure, in my view, is the key variable in this thoroughly bullish forecast.

SELECTED BIBLIOGRAPHY

"Canada Acts to Broaden Disclosure Rules to Private Concerns, Units of U.S. Firms." *Wall Street Journal,* May 23, 1969, p. 8.

"The Companies (Amendment) Act, 1965." *Finance and Commerce* (India), November 1965, pp. 567-87.

T. K. Cowan. "Company Reporting and the Auditor." *Accountancy,* May 1968, pp. 314-20.

"Disclosure Efforts in Switzerland." *Wirtschaftsprüfung,* June 15, 1965, p. 328 (in German).

"Disclosure in Accounts." *Accountant,* August 12, 1967, pp. 189-91.

"Disclosure in Company Accounts." *Accountancy,* November 1966, pp. 756-57.

Eldon S. Hendriksen. "Disclosure — Insights Into Requirements in the United Kingdom." *International Journal of Accounting,* Spring 1969, pp. 21-32.

S. S. Highleyman. "A Caveat for Companies with U.S. Shareholders." *The Chartered Secretary,* October 1966, pp. 401-4.

"The Inside Dope: European Nations Push Laws Compelling Firms to Disclose More Data." *Wall Street Journal,* November 30, 1966, pp. 1, 13.

Hermann Karoli. "The Aim of Disclosure in Company Law." *Journal UEC,* October 1969, pp. 225-27.

Marcel F. Kohler and Adolph Matz. "Swiss Financial Reporting and Auditing Practices." *Abacus,* August 1968, pp. 3-16.

"Learning the Secrets of Companies Abroad." *Business Week,* September 9, 1967, pp. 94-98.

Gerhard G. Mueller and Hiroshi Yoshida. *Accounting Practices in Japan.* Seattle: International Accounting Studies Institute, University of Washington, 1968.

"New Disclosures Noted in Annual Reports." *Financial Executive,* June 1967, pp. 68, ff.

"New Look, New Jobs For Annual Reports." *News Front,* April 1966, pp. 12-16.

Harold Rose. *Disclosure in Company Accounts.* Eaton Paper No. 1. London: Institute of Economic Affairs, Ltd., 1965.

Patrick Sergeant. "Who's Afraid of Disclosure." *The Director,* March 1966, pp. 434-35.

Surendra S. Singhvi. "Corporate Financial Disclosure in the United States." *Mississippi Valley Journal of Business and Economics,* Fall 1969, pp. 43-50.

"The Spirit of Disclosure." *Australian Accountant,* November 1967, p. 609.

"Those Nosey Americans." *Economist,* February 12, 1966, p. 642.

"Trend to Increased Financial Disclosure in International Accounting Could Have Important Long Range Effects on Capital Markets." *Lybrand Newsletter,* July-August 1966, pp. 1-6.

"20th Edition of 'Trends' Shows Moves Toward Fuller Disclosure." *Journal of Accountancy,* December 1966, p. 24.

Anita I. Tyra. *Companies Laws and Financial Reporting: West Germany, France, and the United Kingdom.* Seattle: International Accounting Studies Institute, University of Washington, 1971.

"Unlimited Modes." *Economist,* November 11, 1967, p. 664.

An Application and Evaluation of Selected Alternative Accounting Income Models[1]

JOHN R. HANNA*

At a seminar in basic research in accounting measurement held in 1966, Professor William J. Vatter suggested that accountants need "to establish how much difference actually results, in a given case, from the use of different accounting procedures. Although there has been extensive discussion of various accounting methods via hypothetical situations and examples, there have been only a few cases in which alternative accounting models could be followed over a period of time in an actual situation."[2] Professors Mautz and Gray, writing in 1970 suggested that accountants have developed "a number of carefully worked out theories of general accounting and income determination within recent years. While these may hold long-range benefits, almost without exception, little effort has been expended in applying the results of these circumstances to test their applicability."[3] The objective

* John R. Hanna, C.A., is associate professor of accounting and finance and associate dean of the faculty of business, McMaster University, Hamilton, Ontario, Canada. He did his undergraduate work at McMaster and earned his M.B.A. and Ph.D. degrees at the University of Michigan.

[1] The complete research study which forms a basis for this paper will be published by the Society of Industrial Accountants of Canada. The financial support received from the society is gratefully acknowledged. In addition, the generous cooperation of the Imperial Tobacco Company of Canada Limited permitted this reasearch study to be conducted.

[2] William J. Vatter, "Obstacles to the Specification of Accounting Principles," in *Research in Accounting Measurement*, ed. Robert K. Jaedicke, Yuji Ijiri, and Oswald Nielsen (Menasha, Wisconsin: American Accounting Association, 1966), p. 86.

[3] R. K. Mautz and Jack Gray, "Some Thoughts on Research Needs in Accounting," *Journal of Accountancy* (September 1970), p. 57.

of this study was to apply selected models or concepts for the determination of financial position and income and to compare and evaluate the usefulness, feasibility, and objectivity of the resulting sets of statements.

MOTIVATION FOR STUDY

The motivation for this study came not from a simple desire to apply the "recently developed theories or models" that Mautz and Gray mention, but rather from the pioneering of earlier accountants such as Henry W. Sweeney. Sweeney's book, *Stabilized Accounting,*[4] is best known for its comments and recommendations relating to the general price-level adjusted or common-dollar historical cost model. More important, although less well remembered, was Sweeney's suggestion that common-dollar current value statements — specifically replacement cost statements — could prove to be more useful than common-dollar historical cost statements.[5] There would seem to be a need to apply and compare the results of the application of different income models before continuing our studies of various specific models.

The Study

This study includes six parts. They are:

1. the selection and conceptual evaluation of models to be applied and compared,
2. the background information concerning the company selected for the application of the models,
3. the methods used and problems encountered in applying the alternative models,
4. a limited survey of financial statement users,
5. a comparison and evaluation of the statements prepared, and
6. conclusions and recommendations.

The Models

The models selected as most appropriate for study were:

1. the traditional historical cost model,
2. a common-dollar historical cost model,
3. a current value model, and
4. a common-dollar current value model.

---

[4] Henry W. Sweeney, *Stabilized Accounting* (New York: Holt, Rinehart and Winston, Inc., 1964).

[5] Ibid., p. 44.

After a theoretical consideration of the nature of income and having recognized the inherently subjective nature of income measurement, Hick's often-quoted definition of income based on the change in prosperity for a particular period[6] was selected as an economic income ideal for purposes of this study. It was concluded that, of the models selected for application, the one which most closely approaches economic income is the common-dollar current value model.[7]

Imperial Tobacco

The Imperial Tobacco Company of Canada, Ltd. (now IMASCO, Ltd.) is the most highly integrated tobacco company in Canada. In addition to manufacturing tobacco products, Imperial operates a chain of retail tobacco and sundries stores and, at the time of this study, had interests in the aluminum foil and wine industries in Canada. Imperial was selected for purposes of this study because:

1. its wide range of operations was desirable since a greater variety of problems were encountered in applying the income models,
2. Imperial used current values for fixed assets during the period studied and had data on hand that are not ordinarily available,[8] such as detailed fixed asset ledgers and appraisal results,
3. Imperial's management had indicated an interest in improved financial reporting when it switched to current values for fixed assets in 1961, and
4. Canadian financial analysts had been receiving Imperial's part-current-value statements for a number of years. This was expected to, and did, prove valuable in the survey section of the study.

---

[6] J. R. Hicks, *Value and Capital,* second ed. (London: Oxford University Press, 1946), p. 172.

[7] Briefly, this conclusion is reached because this model minimizes the time period errors (errors that arise when income belonging to one period under the economic income concept are included in some other period using an alternative concept) and measurement unit errors (errors that arise when accountants fail to adjust dollar amounts for changes in the purchasing power of the monetary unit of account over time) that can occur in preparing financial statements.

[8] Of incidental interest to this study is the fact that Imperial Tobacco dropped their current value accounting for fixed assets in 1969. The reversion to full historical cost accounting occurred primarily because of financial analysts' complaints regarding the use of different methods of accounting by Imperial compared with those employed generally in the tobacco industry. The only valid conclusion that can be drawn from this reversion, in the author's opinion, is that a single company cannot implement a significant change in accounting procedures and expect that it will be endorsed by financial statement users. To receive general user acceptance, changes should be made on at least an industry-wide basis.

STATEMENT PREPARATION

Statements were prepared for the six-year period 1962-67. The preparation of traditional historical cost (HC) statements required only adjustments to convert Imperial current value fixed asset and related financial statement items to historical cost. Although this procedure was laborious, major problems were not encountered in completing this adjustment. Historical cost financial statements for Imperial covering the years 1962 through 1967 are provided in Exhibits 1-1 and 1-2.

The model used in preparing the common-dollar historical cost (CDHC) statements was based, in the main, on Accounting Principles Board Statement No. 3 — *Financial Statements Restated for General Price-Level Changes*.[9] The Canadian Gross National Expenditure Implicit Price Index (similar to the United States GNP Implicit Price Deflator), with a 1945 cut-off date, was used in preparing common-dollar statements.[10]

Major problems involved in preparing CDHC statements included the time taken to gather data relating to transactions that occurred near the beginning of the period studied and the need to identify the actual timing of significant transactions rather than assuming that all transactions occurred at the average price level for the period[11] CDHC statements for Imperial Tobacco are provided in Exhibits 2-1 and 2-2.

The current value (CV) model employed in this study closely resembles the one advocated by Sprouse and Moonitz in AICPA Research Study No. 3 — *A Tentative Set of Broad Accounting Principles for Business Enterprises*.[12] This model might properly be called a

[9] American Institute of Certified Public Accountants, Accounting Principles Board, *Financial Statements Restated for General Price-Level Changes,* Statement of Accounting Principles Board No. 3 (New York: American Institute of Certified Public Accountants, 1969).

[10] Since data were available, statements were also prepared for this period using the Canadian consumer price index and, for one year, statements were prepared using the Canadian Price Index going back to 1913 for comparison with statements prepared using a 1945 cut-off date. Results of a comparison between the two indexes and cut-off dates indicate a need for further study of the impact that different indexes and cut-off dates can have in preparing financial statements.

[11] The average price level assumption was not acceptable in Imperial's case since leaf tobacco inventory stocks, a most significant item, are purchased from November through April during each year and not evenly over a twelve-month period.

[12] Robert T. Sprouse and Maurice Moonitz, *A Tentative Set of Broad Accounting Principles for Business Enterprises,* Accounting Research Study No. 3 (New York: American Institute of Certified Public Accountants, 1962).

multioption model since different approaches can be used in valuing individual assets rather than requiring that a single valuation approach be applied consistently for all financial statement items. This multioption approach was taken in this study because the objective of the ideal income model should be to approach the conceptual economic income model as closely as possible given constraints of feasibility and objectivity. There would seem to be little value in employing a "single-option" approach[13] when criteria of objectivity, feasibility, and usefulness, rather than consistency of approach, have been adopted.

In brief, the procedures employed and problems encountered in preparing CV statements for Imperial were as follows:

Finished Goods Inventories — at current selling prices less estimated selling costs.

Leaf Tobacco Inventories — at current replacement cost, using the current price of green tobacco leaf adjusted by adding current costs of handling and storage.

Other Inventories — at current replacement cost.

Marketable Securities, Other Investments and Debenture Liability — at market values for all significant items.

Investment in Non-Consolidated Subsidiaries — cost plus equity in profits since acquisition.[14]

Fixed Assets — at current replacement costs employed by Imperial in their audited financial statements during this period.[15] Current replacement costs of land and buildings were determined by independent appraisers while similar costs of machinery, equipment, furniture, and fixtures were obtained by applying specific price indexes selected by management to historical cost data. These indexes were adjusted for exchange rate changes, duty, and sales tax changes where necessary.

Other Items — all significant items were determined to be at current value.

The major problems encountered in preparing CV statements from

[13] For example, E. O. Edwards and P. W. Bell, *The Theory and Measurement of Business Income* (Berkeley, Calif.: University of California Press, 1961).

[14] All non-consolidated subsidiaries were recent acquisitions acquired during the six-year period covered by this study.

[15] It is interesting to note that the audit reports for Imperial during this period did not indicate a departure from Canadian generally accepted accounting principles. This would indicate that at least one national Canadian accounting firm felt that the use of current values based on appraisals and price level index adjustments are in accordance with generally accepted Canadian accounting principles.

Exhibit 1-1. Historical Cost Balance Sheets as at December 31, 1962-67, Imperial Tobacco Company of Canada Limited (000s)

Year	1962	1963	1964	1965	1966	1967
Current Assets						
Cash and term deposits	$ 13,037	$ 13,662	$ 13,165	$ 11,263	$ 11,559	$ 10,182
Marketable securities	13,323	11,538	13,100	11,122	11,835	13,303
Accounts receivable less allowance for doubtful accounts	10,763	11,156	14,889	16,849	16,509	17,044
Leaf tobacco, manufacturing materials, supplies, and merchandise	86,004	85,181	82,474	81,179	75,770	82,608
Total Current Assets	$123,127	$121,537	$123,628	$120,413	$115,673	$123,137
Current Liabilities						
Accounts payable and accrued liabilities	$ 6,272	$ 6,265	$ 6,924	$ 8,331	$ 9,961	$ 9,521
Income, excise and other taxes	21,505	19,838	21,087	21,079	17,727	22,896
Provision for dividends	1,571	1,317	1,313	1,793	1,065	1,057
Debt maturing within one year	700	700	700	1,789		
Total Current Liabilities	$ 30,048	$ 28,120	$ 30,024	$ 32,992	$ 28,753	$ 33,474
Net Working Capital	$ 93,079	$ 93,417	$ 93,604	$ 87,421	$ 86,920	$ 89,663

Other Assets						
Loans and advances to nonconsolidated subsidiaries	$	$	$	$ 786	$ 1,251	$ 2,503
Investment in nonconsolidated subsidiaries				12,291	12,174	12,318
Other investments	1,267	2,636	6,548	1,061	951	1,021
Special refundable tax					540	359
Prepaid expenses and deferred charges	757	761	1,366	1,282	1,225	1,345
Fixed assets	33,699	34,769	33,807	33,185	38,198	38,846
Goodwill, trade marks, and patents	1	1	1	1	234	1
	$128,803	$131,584	$135,326	$136,027	$141,493	$146,056
Other Liabilities						
Debentures	$ 9,987	$ 8,582	$ 7,035	$ 2,262	$ 2,261	$ 2,261
Deferred income taxes	2,084	2,790	3,106	3,519	4,716	5,069
Excess of Assets over Liabilities	$ 12,071	$ 11,372	$ 10,141	$ 5,781	$ 6,977	$ 7,330
	$116,732	$120,212	$125,185	$130,246	$134,516	$138,726
Provided by:						
Share Capital:						
Common	$ 48,353	$ 48,353	$ 48,353	$ 48,353	$ 48,353	$ 48,353
Preferred	8,030	7,215	6,973	6,766	6,518	5,973
Capital surplus		815	1,057	1,264	1,512	2,057
Retained earnings	60,349	63,829	68,802	73,863	78,133	82,343
	$116,732	$120,212	$125,185	$130,246	$134,516	$138,726

Exhibit 1-2. Historical Cost Consolidated Income and Retained Earnings Statements, 1962-67, Imperial Tobacco Company of Canada Limited (000s)

Year	1962	1963	1964	1965	1966	1967
Net Sales	$373,392	$355,065	$351,456	$366,262	$373,069	$393,315
Cost of Sales						
Federal sales and excise taxes, and excise duty	$ 223,836	$210,764	$204,798	$209,495	$212,434	$216,845
Manufacturing costs excluding depreciation	120,660	117,995	121,121	127,980	133,879	148,650
Depreciation	3,237	3,327	3,372	3,486	3,835	4,135
Total Cost of Operations	$347,733	$332,086	$329,291	$340,961	$350,148	$369,630
Earnings from Operations	$ 25,659	$ 22,979	$ 22,165	$ 25,301	$ 22,921	$ 23,685
Income from investments in nonconsolidated subsidiaries	$	$	$	$ 101	$ 336	$ 149
Income from other investments	787	1,090	1,232	1,638	1,631	1,466
Interest on funded debt	(332)	(283)	(255)	(196)	(83)	(68)
Earnings before income taxes and nonrecurring items	$ 26,114	$ 23,786	$ 23,142	$ 26,844	$ 24,805	$ 25,232
Gain (or loss) on disposal of fixed assets	147	(370)	764	(65)	(163)	6
Write off of goodwill				(322)	(80)	(233)
Costs of purchase of 6% preferred shares for cancellation		(269)	(79)	(74)	(68)	(138)
Earnings before income taxes	$ 26,261	$ 23,147	$ 23,827	$ 26,383	$ 24,494	$ 24,867
Income taxes	(12,482)	(11,393)	(11,178)	(12,966)	(11,807)	(12,010)

Net Earnings	$ 13,779	$ 11,754	$ 12,649	$ 13,417	$ 12,687	$ 12,857
Retained earnings, January 1	54,063	60,349	63,829	68,802	73,824*	78,133
Dividends	(7,493)	(7,459)	(7,434)	(8,149)	(8,130)	(8,102)
Transferred to capital surplus		(815)	(242)	(207)	(248)	(545)
Retained earnings, December 31	$ 60,349	$ 63,829	$ 68,802	$ 73,863	$ 78,133	$ 82,343

* Opening balance adjusted by $39,000 to reflect loss to January 1, 1966 on operation of Beau Chatel Wines first consolidated in 1966.

Exhibit 2-1. Common-Dollar[a] Historical Cost Balance Sheets as at December 31, 1962-67, Imperial Tobacco Company of Canada Limited (December 31, 1967 dollars) (000s)

Year	1962	1963	1964	1965	1966	1967
Current Assets						
Cash and term deposits	$ 15,267	$ 15,726	$ 14,730	$ 12,228	$ 11,961	$ 10,182
Marketable securities	15,602	13,281	14,657	12,075	12,246	13,303
Accounts receivable less allowances for doubtful accounts	12,604	12,841	16,659	18,292	17,083	17,044
Leaf tobacco, manufacturing materials, supplies, and merchandise	102,355	99,830	94,700	91,306	81,391	84,610
Total Current Assets	$145,828	$141,678	$140,746	$133,901	$122,681	$125,139
Current Liabilities						
Accounts payable and accrued liabilities	$ 7,345	$ 7,212	$ 7,747	$ 9,045	$ 10,307	$ 9,521
Income, excise, and other taxes	25,184	22,835	23,594	22,885	18,343	22,896
Provision for dividends	1,840	1,516	1,469	1,947	1,102	1,057
Debt maturing within one year	820	806	783	1,942		
Total Current Liabilities	$ 35,189	$ 32,369	$ 33,593	$ 35,819	$ 29,752	$ 33,474
Net Working Capital	$110,639	$109,309	$107,153	$ 98,082	$ 92,929	$ 91,665

Other Assets						
Loans and advances to nonconsolidated subsidiaries	$	$	$	$ 853	$ 1,294	$ 2,503
Investment in nonconsolidated subsidiaries				13,784	13,629	13,773
Other investments	1,504	3,083	7,486	1,152	984	1,021
Special refundable tax					559	359
Prepaid expenses and deferred charges	963	939	1,598	1,468	1,361	1,430
Fixed assets	44,998	45,838	44,302	43,236	47,935	47,851
Goodwill, trade marks, and patents	1	1	1	1	305[b]	1
	$158,105	$159,170	$160,540	$158,576	$158,996	$158,603
Other Liabilities						
Debentures	$ 11,696	$ 9,879	$ 7,871	$ 2,456	$ 2,340	$ 2,261
Deferred income taxes	2,441	3,212	3,475	3,820	4,880	5,069
	$ 14,137	$ 13,091	$ 11,346	$ 6,276	$ 7,220	$ 7,330
Excess of Assets over Liabilities	$143,968	$146,079	$149,194	$152,300	$151,776	$151,273
Provided by:						
Share capital:						
Common	$107,043	$107,043	$107,043	$107,043	$107,043	$107,043
Preferred	9,404	8,305	7,802	7,346	6,745	5,973
Capital surplus		946	1,220	1,448	1,709	2,260
Retained earnings	27,521	29,785	33,129	36,463	36,279	35,997
	$143,968	$146,079	$149,194	$152,300	$151,776	$151,273

[a] General price level adjusted using the Gross National Expenditure Implicit Price Index, Dominion Bureau of Statistics, Ottawa, Canada.

[b] Calculated by comparing price-level adjusted investment in subsidiary balance with price-level adjusted balances of assets and liability accounts for Beau Chatel Wines.

Exhibit 2-2. Common-Dollar[a] Historical Cost Consolidated Income and Retained Earnings Statements, 1962-67, Imperial Tobacco Company of Canada Limited (December 31, 1967 dollars) (000s)

Year	1962	1963	1964	1965	1966	1967
Net Sales	$440,905	$412,042	$397,405	$402,764	$392,058	$397,350
Cost of Sales						
Federal sales and excise taxes, and excise duty	$264,308	$244,585	$231,573	$230,373	$223,247	$219,070
Manufacturing costs excluding depreciation	143,899	138,413	139,177	142,485	144,764	153,884
Depreciation	4,259	4,300	4,303	4,406	4,711	4,950
Total Cost of Operations	$412,466	$387,298	$375,053	$377,264	$372,722	$377,904
Earnings from Operations	$ 28,439	$ 24,744	$ 22,352	$ 25,500	$ 19,336	$ 19,446
Income from investments in nonconsolidated subsidiaries	$	$	$	$ 111	$ 353	$ 151
Income from other investments	929	1,265	1,393	1,801	1,714	1,481
Interest on funded debt	(392)	(328)	(288)	(216)	(87)	(69)
Purchasing power gain (or loss) on monetary items	525	256	489	158	89	166
Earnings before Income Taxes and Nonrecurring Items	$ 29,501	$ 25,937	$ 23,946	$ 27,354	$ 21,405	$ 21,175
Gain (or loss) on disposal of fixed assets	126	(538)	806	(138)	(264)	(146)
Write off of goodwill				(354)	(84)	(304)
Cost of purchase of 6% preferred shares for cancellation		(312)	(89)	(81)	(71)	(139)

Earnings before Income Taxes	$ 29,627	$ 25,087	$ 24,663	$ 26,781	$ 20,986	$ 20,586
Income taxes	(14,739)	(13,221)	(12,639)	(14,258)	(12,408)	(12,133)
Net Earnings	$ 14,888	$ 11,866	$ 12,024	$ 12,523	$ 8,578	$ 8,453
Retained earnings, January 1	21,481	27,521	29,785	33,129	36,506[b]	36,279
Dividends	(8,848)	(8,656)	(8,406)	(8,961)	(8,544)	(8,185)
Transfer to capital surplus		(946)	(274)	(228)	(261)	(550)
Retained Earnings, December 31	$ 27,521	$ 29,785	$ 33,129	$ 36,463	$ 36,279	$ 35,997

[a] General price level adjusted using the Gross National Expenditure Implicit Price Index, Dominion Bureau of Statistics, Ottawa.
[b] Opening balance adjusted by $43,000 to reflect loss to January 1, 1966 on operation of Beau Chatel Wines first consolidated in 1966.

Imperial related to the determination of current values for tobacco leaf inventories. An Imperial official has commented on the difficulty of determining current values for tobacco leaf as follows:

> The basic problem resulted from the fact that tobacco leaf was typically aged for three years before being converted into tobacco products. Generally speaking, aged tobacco leaf had a greater value than did freshly harvested tobacco simply because it was older and therefore closer to the point where it could be processed. This relatively slow turnover resulting from the nature of the raw material, made inventory values much more susceptible to inflation. The LIFO inventory method would take care of this problem as far as income was concerned, but would not conform to the replacement cost basis for stating fixed assets. The use of replacement cost for leaf tobacco inventory was complicated by the fact that there was, in fact, no replacement in Canada for aged tobacco. Once a year's crop was harvested there would be no replacement until the next year's crop was ready and that, of course, would not be aged. Aged tobacco could generally be obtained in the United States, but there was a substantial tariff on imported tobacco. These were the problems that the company had to resolve in deciding how to account for inventory.[16]

Given these difficulties, the decision to use the current price of green tobacco leaf adjusted by adding current costs of handling and storage was adopted. Some accountants may suggest that this does not really yield a current replacement value but, at a minimum, this method does result in the use of procedures that reflect changes in the current price of leaf tobacco. For companies with large inventories that require aging, serious difficulties are encountered in attempting to obtain current values and, where major fluctuations in market value occur over time, the results are also volatile.[17] CV financial statements for the years 1962-67 are provided in Exhibits 3-1 and 3-2.

In connection with the preparation of common-dollar current value (CDCV) financial statements the most noteworthy finding was the ease of preparation of current value statements adjusted for changes in the purchasing power of the dollar relative to the more detailed procedures required in preparing CDHC statements. The preparation of CDCV statements requires only data relating to general price level changes during the reporting period, opening and closing mixed dollar current value statements and information relating to the dates of capital stock issues by the firm. Readers will also note that the CDCV

[16] D. R. Ladd and J. R. Graham, "Imperial Tobacco Company of Canada" (London, Canada: The School of Business Administration, The University of Western Ontario, Case 1CH8C1, WFA109 plus supplement 1CH8C1S), p. 4.

[17] See the holding gains and losses on inventory in Exhibit 3-2 and compare with holding gains for fixed assets in the same exhibit.

statements provided in Exhibits 4-1 and 4-2 are very similar to unadjusted CV statements. For the year 1967,[18] only owners' equity items differ in the balance sheet while in the income statement all items included in the calculation of operating income are essentially the same,[19] although significant changes occur in the non-operating section of the CDCV income statement with the addition of purchasing power gains and losses and the elimination of fictitious portions of holding gains.

After preparing the different sets of statements, it was concluded that each model was both feasible and "sufficiently" objective[20] for, at least, the Imperial Tobacco Company.

SURVEY OF USERS

After reviewing the literature relating to surveys of financial statement users concerning the usefulness of alternative income concepts the writer became concerned about the receptivity of users to largely unknown alternative income models. Although some recent surveys have discovered significant user interest in current value and common-dollar statements, it appeared that users preferred, in the main, what they were accustomed to — historical cost statements.

Keeping in mind this resistance to new or different income models, a limited survey was undertaken. In an effort to include most capable users, the five largest of five types of Canadian financial institutions — banks, trust companies, life insurance companies, mutual funds, and investment houses — were approached.

With only twenty-five companies to be approached, a high level of cooperation was required in conducting this survey. Senior executive members of the Society of Industrial Accountants and the Canadian Institute of Chartered Accountants together with Dean Howard Ross[21] supplied introductory letters of recommendation to the president of each of the financial institutions selected. The presidents were asked to offer the cooperation of their chief equity security analyst and, of the twenty-five institutions approached, twenty-one agreed to cooperate.

Statements were made available in advance, and each analyst was

---

[18] The last (current) year for the period studied.

[19] These items are adjusted to year-end dollars from "average for 1967" dollars but the amount of the adjustment is not significant.

[20] Sufficiently objective to permit the independent audit of statements using each model.

[21] Dean of the Faculty of Management, McGill University and author of several articles and books on the topic of improved financial reporting.

Exhibit 3-1. Current Value Consolidated Balance Sheets as at December 31, 1962-67, Imperial Tobacco Company of Canada Limited (000s)

Year	1962	1963	1964	1965	1966	1967
Current Assets						
Cash and term deposits	$ 13,037	$ 13,662	$ 13,165	$ 11,263	$ 11,559	$ 10,182
Marketable securities	13,417	11,578	13,112	11,146	11,907	13,349
Accounts receivable less allowance for doubtful accounts	10,763	11,156	14,889	16,849	16,509	17,044
Leaf tobacco, manufacturing materials, supplies, and merchandise	83,204	83,305	89,691	92,343	86,087	83,821
Total Current Assets	$120,421	$119,701	$130,857	$131,601	$126,062	$124,396
Current Liabilities						
Accounts payable and accrued liabilities	$ 6,272	$ 6,265	$ 6,924	$ 8,331	$ 9,961	$ 9,521
Income, excise, and other taxes	21,505	19,838	21,087	21,079	17,727	22,896
Provision for dividends	1,571	1,317	1,313	1,793	1,065	1,057
Debt maturing within one year	700	700	700	1,789		
Total Current Liabilities	$ 30,048	$ 28,120	$ 30,024	$ 32,992	$ 28,753	$ 33,474
Net Working Capital	$ 90,373	$ 91,581	$100,833	$ 98,609	$ 97,309	$ 90,922

Other Assets						
Loans and advances to nonconsolidated subsidiaries	$	$	$	$ 786	$ 1,251	$ 2,503
Investment in nonconsolidated subsidiaries				12,412	12,333	12,665
Other investments	2,028	3,417	7,323	1,834	1,715	1,793
Special refundable tax					540	359
Prepaid expenses and deferred charges	754	770	1,365	1,331	1,288	1,410
Fixed assets	42,039	44,279	43,630	44,057	48,561	47,993
Goodwill, trade marks, and patents	1	1	1	1	234	1
	$135,195	$140,048	$153,152	$159,030	$163,231	$157,646
Other Liabilities						
Debentures	$ 8,974	$ 7,797	$ 6,503	$ 2,036	$ 2,024	$ 2,058
Deferred income taxes	1,220	2,504	7,550	10,248	10,738	6,182
	$ 10,194	$ 10,301	$ 14,053	$ 12,284	$ 12,762	$ 8,240
Excess of Assets over Liabilities	$125,001	$129,747	$139,099	$146,746	$150,469	$149,406
Provided by:						
Share capital:						
Common	$ 48,353	$ 48,353	$ 48,353	$ 48,353	$ 48,353	$ 48,353
Preferred	8,030	7,215	6,973	6,766	6,518	5,973
Capital surplus		815	1,057	1,264	1,512	2,057
Retained earnings	68,618	73,364	82,716	90,363	94,086	93,023
	$125,001	$129,747	$139,099	$146,746	$150,469	$159,406

Exhibit 3-2. Current Value Consolidated Income and Retained Earnings Statements, 1962-67, Imperial Tobacco Company of Canada Limited (000s)

Year	1962	1963	1964	1965	1966	1967
Net Sales	$373,392	$355,065	$351,456	$366,262	$373,069	$393,315
Cost of Sales						
Federal sales and excise taxes, and excise duty	$223,836	$210,764	$204,798	$209,495	$212,434	$216,845
Manufacturing costs excluding depreciation	119,775	114,603	123,497	133,917	141,176	155,122
Depreciation	3,757	4,050	4,243	4,539	4,864	5,034
	$347,368	$329,417	$332,538	$347,951	$358,474	$377,001
Earnings from Operations	$ 26,024	$ 25,648	$ 18,918	$ 18,311	$ 14,595	$ 16,314
Income from investments in nonconsolidated subsidiaries	$	$	$	$ 222	$ 374	$ 337
Income from other investments	893	1,056	1,198	1,648	1,670	1,448
Interest on funded debt	(371)	(511)	(508)	(502)	(72)	(102)
Increase in value of nonmonetary assets:						
Inventories	(3,048)	(2,475)	11,435	9,869	6,424	(2,654)
Fixed assets	2,008	1,918	2,634	2,185	657	128
Other	(19)	19	24	65	40	24
Earnings before Income Taxes and Nonrecurring Items	$ 25,487	$ 25,655	$ 33,701	$ 31,798	$ 23,688	$ 15,495
Gain or loss on disposal of fixed assets	(92)	(395)	(686)	(148)	(300)	(439)
Write off of goodwill				(322)	(80)	(233)
Cost of purchase of 6% preferred shares for cancellation		(269)	(79)	(74)	(68)	(138)

Earnings before Income Taxes	$ 25,395	$ 24,991	$ 32,936	$ 31,254	$ 23,240	$ 14,685
Income taxes	12,139	11,971	15,908	15,251	11,100	7,101
Net Earnings	$ 13,256	$ 13,020	$ 17,028	$ 16,003	$ 12,140	$ 7,584
Retained earnings, January 1	62,855	68,618	73,364	82,716	90,324*	94,086
Dividends	(7,493)	(7,459)	(7,434)	(8,149)	(8,130)	(8,102)
Transfer to capital surplus		(815)	(242)	(207)	(248)	(545)
Retained earnings, December 31	$ 68,618	$ 73,364	$ 82,716	$ 90,363	$ 94,086	$ 93,023

* Opening balance adjusted to reflect $39,000 loss to January 1, 1966 on operation of Beau Chatel Wines first consolidated in 1966.

Exhibit 4-1. Common-Dollar* Current Value Consolidated Balance Sheets as at December 31, 1962-67, Imperial Tobacco Company of Canada Limited (December 31, 1967 dollars) (000s)

Year	1962	1963	1946	1965	1966	1967
Current Assets						
Cash and term deposits	$ 15,268	$ 15,726	$ 14,730	$ 12,228	$ 11,961	$ 10,182
Marketable securities	15,713	13,327	14,671	12,101	12,321	13,349
Accounts receivable less allowance for doubtful accounts	12,604	12,841	16,659	18,292	17,083	17,044
Leaf tobacco, manufacturing materials, supplies, and merchandise	97,439	95,891	100,353	100,253	89,079	83,821
Total Current Assets	$141,024	$137,785	$146,413	$142,874	$130,444	$124,396
Current Liabilities						
Accounts payable and accrued liabilities	$ 7,345	$ 7,211	$ 7,747	$ 9,045	$ 10,308	$ 9,521
Inccme, excise, and other taxes	25,184	22,835	23,594	22,885	18,343	22,896
Provision for dividends	1,840	1,516	1,469	1,946	1,102	1,057
Debt maturing within one year	820	806	783	1,942		
Total Current Liabilities	$ 35,189	$ 32,368	$ 33,593	$ 35,818	$ 29,753	$ 33,474
Net Working Capital	$105,835	$105,417	$112,820	$107,056	$100,691	$ 90,922

Other Assets						
Loans and advances to nonconsolidated subsidiaries	$	$	$	$ 853	$ 1,294	$ 2,503
Investment in nonconsolidated subsidiaries				13,475	12,762	12,665
Other investments	2,375	3,933	8,194	1,991	1,775	1,793
Special refundable tax					559	359
Prepaid expenses and deferred charges	883	886	1,527	1,445	1,333	1,410
Fixed assets	49,231	50,969	48,817	47,831	50,249	47,993
Goodwill, trade marks, and patents	1	1	1	1	242	1
	$158,325	$161,206	$171,359	$172,652	$168,905	$157,646
Other Liabilities						
Debentures	$ 10,509	$ 8,975	$ 7,276	$ 2,210	$ 2,095	$ 2,058
Deferred income taxes	1,429	2,882	8,448	11,126	11,111	6,182
	$ 11,938	$ 11,857	$ 15,724	$ 13,336	$ 13,206	$ 8,240
Excess of Assets over Liabilities	$146,387	$149,349	$155,635	$159,316	$155,699	$149,406
Provided by:						
Share capital:						
Common	$107,043	$107,043	$107,043	$107,043	$107,043	$107,043
Preferred	9,404	8,305	7,802	7,346	6,745	5,973
Capital surplus		946	1,220	1,448	1,709	2,260
Retained earnings	29,940	33,055	39,570	43,479	40,202	34,130
	$146,387	$149,349	$155,635	$159,316	$155,699	$149,406

* General price level adjusted using the Gross National Expenditure Implicit Price Index, Dominion Bureau of Statistics, Ottawa, Canada.

Exhibit 4-2. Common-Dollar[a] Current Value Consolidated Income and Retained Earnings Statements, 1962-67, Imperial Tobacco Company of Canada Limited (December 31, 1967 dollars) (000s)

Year	1962	1963	1964	1965	1966	1967
Net Sales	$440,905	$412,042	$397,405	$402,764	$392,058	$397,350
Cost of Sales						
Federal sales and excise taxes, and excise duty	$264,308	$244,585	$231,573	$230,373	$223,247	$219,070
Manufacturing costs excluding depreciation	141,432	132,993	139,643	147,263	148,362	156,713
Depreciation	4,436	4,700	4,798	4,992	5,111	5,086
	$410,176	$382,278	$376,014	$382,628	$376,720	$380,869
Earnings from Operations	$ 30,729	$ 29,764	$ 21,391	$ 20,136	$ 15,338	$ 16,481
Income from investments in nonconsolidated subsidiaries				70	(237)	(91)
Income from other investments	1,014	1,181	1,217	1,675	1,712	1,435
Interest on funded debt	(438)	(593)	(574)	(552)	(76)	(103)
Increase in value on nonmonetary assets:						
Inventories	(5,961)	(4,587)	9,975	8,008	2,536	(5,652)
Fixed assets	1,286	1,365	1,560	947	(1,625)	(1,552)
Other	(38)	6	(5)	26	(25)	(21)
Purchasing power gain (loss) on monetary items	524	243	484	157	85	164
Earnings before Income Taxes and Nonrecurring Items	$ 27,116	$ 27,379	$ 34,048	$ 30,467	$ 17,708	$ 10,661
Gain or loss on disposal of fixed assets	(109)	(458)	(776)	(163)	(315)	(444)
Write off of goodwill				(354)	(88)	(240)
Cost of purchase of 6% preferred shares for cancellation		(312)	(89)	(81)	(71)	(139)

Earnings before Income Taxes	$ 27,007	$ 26,609	$ 33,183	$ 29,869	$ 17,234	$ 9,838
Income taxes	14,334	13,892	17,988	16,771	11,665	7,174
Net Earnings	$ 12,673	$ 12,717	$ 15,195	$ 13,098	$ 5,569	$ 2,664
Retained earnings, January 1	26,115	29,940	33,055	39,570	43,438[b]	40,202
Dividends	(8,848)	(8,656)	(8,406)	(8,961)	(8,544)	(8,185)
Transfer to capital surplus		(946)	(274)	(228)	(261)	(551)
Retained Earnings, December 31	$ 29,940	$ 33,055	$ 39,570	$ 43,479	$ 40,202	$ 34,130

[a] General price level adjusted using the Gross National Expenditure Implicit Price Index, Dominion Bureau of Statistics, Ottawa, Canada.
[b] Opening balance adjusted to reflect $41,000 loss on January 1, 1966 on operation of Beau Chatel Wines first consolidated in 1966.

Exhibit 5

Concept \ Rank	1	2	3	4
Historical Cost	28	1	0	1
Common-Dollar Historical Cost	0	1	1	28
Current Value	0	10	20	0
Common-Dollar Current Value	2	18	9	1

asked to review each alternative set of statements, conducting a review in the same manner that was employed in conducting the normal review of Imperial Tobacco statements in 1968 when Imperial's actual 1967 statements had been released. Interviews were held with the analysts of each firm after they had completed their analysis in an attempt to insure that the information available on the statements was understood in at least a general sense.

The results of the survey are summarized as follows:

1. All analysts surveyed found some useful data in the alternative sets of statements that were not included in traditional historical cost statements. They indicated that this additional information could improve their ability to analyze Imperial.
2. All but one analyst wanted historical cost statements retained as the main set of financial statements because they felt that this model was the only one that they clearly understood at the present time.
3. A majority of analysts (see Exhibit 5) preferred the common-dollar current value statements as a most useful supplement to historical cost statements.[22] It should be emphasized that those analysts who preferred CDCV statements as a supplement did so primarily because of the current value data incorporated in these statements. Many analysts chose

[22] The number of financial analysts listed in Exhibit 5 exceeds the number of participating financial institutions. Of the twenty-one institutions, nine had two analysts participate in the survey. Since the views of analysts employed by the same institution could, and did differ, the views of all analysts were included.

CDCV statements in preference to CV statements primarily because the CV data desired was unchanged in the CDCV statements and these analysts were willing to accept the additional common-dollar data with the thought that it might prove useful after they had gained further experience with this financial statement model.

4. Analysts indicated that they would prefer to have supplementary CDCV data for a number of companies in different industries with the data made available on a current basis for a period of years in order to better assess the usefulness of the model.

EVALUATION OF ALTERNATIVE MODELS

Exhibits 6-1 through 6-6 compare selected financial statement items and relationships[23] using the four models discussed above plus Imperial's actual financial statement figures (referred to as the "Imperial Basis"). The "Imperial Basis" model reflects Imperial's use of current values for fixed assets and historical cost for other statement items. The common-dollar current value statements are used as a basis for comparison in these exhibits because, as mentioned earlier, this model most closely approaches economic income.

Both the statements themselves and the exhibits reveal notable differences among the various models. For example, in Exhibit 6-2, the various models produce figures which range from a low of 70 percent to a high of 239 percent of common-dollar current value earnings before income taxes and nonrecurring items. Over the relatively short six-year period covered by this study it is useful to note the degree to which other models approximate the results of the CDCV model for each year for different statement figures. Again using the data in Exhibit 6-2 we find for example:

Year	*Closest to CDCV*	*Farthest from CDCV*
1962	CDHC	HC
1963	HC	CV
1964	CV	CDHC
1965	HC	CV
1966	CDHC	HC
1967	CV	HC

In this case each alternative model used is both closest to and farthest

[23] Since Imperial's common-dollar statements are in December 31, 1967 dollars in all cases, it is not appropriate to compare a specific figure, for say 1962, in mixed dollar statements with the same figure in common-dollar statements. To permit comparability the mixed dollar figures in these exhibits are converted to their equivalents in December 31, 1967 dollars.

Exhibit 6-1. Earnings from Operations Comparison, 1962-67 (000s)

Year	Earnings from Operations				Conversion Factor	Percentage of Common Dollar Current Value		
	Imperial Basis*	Historical Cost*	Common Dollar Historical Cost	Current Value* and Common Dollar Current Value		Imperial Basis	Historical Cost	Common Dollar Historical Cost
1962	29,684	30,298	28,439	30,729	1.18081	97	99	93
1963	25,827	26,666	24,744	29,764	1.16047	87	90	83
1964	24,078	25,063	22,352	21,391	1.13074	113	117	104
1965	26,665	27,822	25,500	20,136	1.09966	132	138	127
1966	23,006	24,088	19,336	15,338	1.05090	150	157	126
1967	23,020	23,928	19,446	16,481	1.01026	140	145	118
Avg.	25,380	26,311	23,303	22,306		114	118	104

* In directly converted December 31, 1967 dollar figures.

Exhibit 6-2. Earnings Before Income Tax and Nonrecurring Items Comparison, 1962-67 (000s)

Year	Earnings Before Income Tax and Nonrecurring Items					Percentage of Common Dollar Current Value			
	Imperial Basis*	Historical Cost*	Common Dollar Historical Cost	Current Value*	Common Dollar Current Value	Imperial Basis	Historical Cost	Common Dollar Historical Cost	Current Value
1962	30,222	30,836	29,501	30,095	27,116	111	114	109	111
1963	26,764	27,603	25,937	29,772	27,379	98	101	95	109
1964	25,183	26,168	23,946	38,107	34,048	74	77	70	112
1965	28,361	29,519	27,354	34,967	30,467	93	97	90	115
1966	24,986	26,068	21,405	24,894	17,708	141	147	121	141
1967	24,583	25,491	21,175	15,654	10,661	231	239	199	147
Avg.	26,683	27,614	24,886	28,915	24,563	109	112	101	118

* In directly converted December 31, 1967 dollar figures.

Exhibit 6-3. Net Earnings Comparison, 1962-67 (000s)

Year	Net Earnings					Percentage of Common Dollar Current Value			
	Imperial Basis*	Historical Cost*	Common Dollar Historical Cost	Current Value*	Common Dollar Current Value	Imperial Basis	Historical Cost	Common Dollar Historical Cost	Current Value
1962	15,668	16,270	14,888	15,653	12,673	124	128	117	124
1963	13,171	13,640	11,886	15,109	12,717	104	107	93	119
1964	12,145	14,303	12,024	19,254	15,195	80	94	79	127
1965	14,061	14,754	12,523	17,598	13,098	107	117	96	134
1966	12,626	13,333	8,578	12,758	5,569	227	239	154	229
1967	12,053	12,989	8,453	7,662	2,664	452	488	317	288
Avg.	13,287	13,215	11,392	13,672	10,319	129	138	110	142

* In directly converted December 31, 1967 dollar figures.

from CDCV at least once during the six-year period studied. In general, this also holds true for the other financial statement items compared in Exhibits 6-1 and 6-3 through 6-6. The finding that CDHC and CV amounts can be further away from their CDCV counterparts than conventional HC amounts is particularly significant.[24]

RECOMMENDATIONS

The following recommendations for improved financial reporting are offered:

1. Common-dollar current value statements should be provided as supplements to traditional statements.
2. Some mechanism is needed whereby financial statement users can improve their understanding of the common-dollar current value model.
3. The common-dollar current value model is sufficiently clear in theory that future emphasis should be on application and methodology to accomplish its implementation in practice.
4. Further research of two types is desirable; first, an extension of the present study to include companies in a variety of industries in different countries. Such a study would help to identify the various types of problems that would be faced, were these models to be applied on a broad scale. In addition, a more comprehensive survey of statement users should be conducted — possibly for a period of years on an ongoing basis.

Second, more detailed research is necessary to investigate specific matters:

a) Research to develop a better index of general price level changes
b) Research into ways of developing more accurate indexes over long time periods to avoid the necessity of using arbitrary cutoff dates
c) Research to identify and solve problems that relate to the audit of statements prepared using a better income model

[24] It is interesting to note that Jones, writing in 1955, concluded that "... the use of historical dollar figures alone with no recognition of the effects of changes in purchasing power does not adequately reveal the underlying economic facts and relationships." This study shows that in certain cases both CDHC and CV results can be further from "the underlying facts and economic relationships ..." than conventional HC results. See R. C. Jones, *Price Level Changes and Financial Statements — Case Studies of Four Companies* (Iowa City: American Accounting Association, 1955), p. 84.

Exhibit 6-4. Earnings Per Common Share Comparison, 1962-67
(Expressed in average dollars of each year)

Year	Net Earnings to Common Stockholders					Average No. of Shares o/s	Earnings Per Common Share				
	Imperial Basis	Historical Cost	Common Dollar Historical Cost	Current Value	Common Dollar Current Value		Imperial Basis	Historical Cost	Common Dollar Historical Cost	Current Value	Common Dollar Current Value
1962	12,787	13,297	12,126	12,774	10,251	9,670,532	1.32	1.38	1.25	1.32	1.06
1963	10,902	11,306	9,794	12,572	10,510	9,670,532	1.13	1.17	1.01	1.30	1.09
1964	10,318	12,226	10,211	16,605	13,015	9,670,532	1.07	1.26	1.06	1.72	1.35
1965	12,374	13,004	10,975	15,590	11,498	9,670,532	1.28	1.35	1.14	1.61	1.19
1966	11,620	12,293	7,769	11,746	4,905	9,670,532	1.20	1.27	.80	1.22	.51
1967	11,565	12,491	8,001	7,218	2,271	9,670,532	1.20	1.29	.83	.75	.24

Exhibit 6-5. Stockholders' Equity Comparison, December 31, 1962-67 (000s)

Year	Stockholders' Equity				Percentage of Common Dollar Current Value		
	Imperial Basis*	Historical Cost*	Common Dollar Historical Cost	Current Value* = Common Dollar Current Value	Imperial Basis	Historical Cost	Common Dollar Historical Cost
1962	125,842	116,732	143,968	146,387	86	80	98
1963	130,836	120,212	146,079	149,349	88	80	98
1964	136,535	125,185	149,194	155,635	88	80	96
1965	143,151	130,246	152,300	159,316	90	82	96
1966	147,405	134,516	151,776	155,699	95	86	97
1967	150,817	138,726	151,273	149,406	101	93	101
Avg.	139,098	127,603	132,332	152,632	91	84	98

* In directly converted December 31, 1967 dollar figures.

Exhibit 6-6. Return on Stockholders' Equity Comparison, 1962-67 (000s)

Year	Average Stockholders' Equity					Net Earnings					Percent Return				
	Imperial Basis	Historical Cost	Common Dollar Historical Cost	Current Value	Common Dollar Current Value	Imperial Basis	Historical Cost	Common Dollar Historical Cost	Current Value	Common Dollar Current Value	Imperial Basis	Historical Cost	Common Dollar Historical Cost	Current Value	Common Dollar Current Value
1962	121,950	113,589	141,053	122,119	144,580	13,269	13,779	14,888	13,256	12,673	10.9	12.1	10.6	10.9	8.8
1963	128,339	118,472	145,023	127,374	147,868	11,350	11,754	11,886	13,020	12,717	8.8	9.9	8.2	10.2	8.6
1964	133,685	122,698	147,636	134,423	152,492	10,741	12,649	12,024	17,028	15,195	8.0	10.3	8.1	12.7	10.0
1965	139,843	127,715	150,747	142,922	157,475	12,787	13,417	12,523	16,003	13,098	9.1	10.5	8.3	11.2	8.3
1966	145,278	132,381	152,038	148,607	157,507	12,014	12,687	8,578	12,140	5,569	8.3	9.6	5.6	8.2	3.5
1967	149,111	136,621	151,524	149,937	152,552	11,931	12,857	8,453	7,584	2,664	8.0	9.4	5.6	5.1	1.7
Avg.	136,367	125,246	148,004	137,564	152,079	12,015	12,857	11,392	13,172	10,319	8.8	10.3	7.7	9.6	6.8

d) Research to determine ways of measuring the current value of assets, of various kinds, in a wide variety of uses

CONCLUSION

The conceptual advantages of the common-dollar current value model have been indicated and the fact that other models can yield results that differ widely from common-dollar current value results has been established above. Although the scope of this study is limited — one company for only a six-year period — these findings seem to provide an argument, at least tentatively, against the advocates of common-dollar historical cost and current value statements.[25] Income models that can be less accurate than the present historical cost model from time-to-time do not seem to be the type of models upon which accountants should be focusing their attention. It would seem that accountants should be aiming directly for a change to common-dollar current values. The current emphasis on common-dollar historical cost statements in certain countries is an undesirable development in that it is diverting research activity away from the model that should be receiving attention from the accounting profession.

[25] And against the arguments of at least some partial adjustment advocates based on an analysis of Imperial's actual statement figures.

ONE YEAR'S SUBSCRIPTION TO *THE INTERNATIONAL JOURNAL OF ACCOUNTING EDUCATION AND RESEARCH*

Volumes 1 through 7 (1965–1972) *(Available by volume or issue also)*	$21.00
Volume 8, Numbers 1 and 2 (1972–73)	3.00
Single copy issue	1.80

OTHER PUBLICATIONS OF THE CENTER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING

A Statement of Basic Accounting Postulates and Principles (English Edition)	1.00
A Statement of Basic Accounting Postulates and Principles (Spanish Edition)	1.00
Theory of Accounts in Double-Entry Bookkeeping, by Karl Käfer	2.00
The Evolution of Direct Costing, by Charles Weber	2.00
The Nature and Stages of Accounting Development in Latin America, by Edward Elliott	2.50
Input-Output Analysis and Its Application to Business Accounting, by Shawki Farag	2.50
The Role of Accounting in the Economic Development of England 1500–1750, by James O. Winjum	3.00
Accounting Research 1960–70: A Critical Evaluation, Nicholas Dopuch and Lawrence Revsine, Editors	3.00
Cost Terminology and Cost Theory: A Study of Its Development and Present State in Central Europe, by H. M. Schoenfeld*	3.00
Thoughts on Accounting, by A. C. Littleton	3.00
Pagatoric Theory of Financial Income Determination, by Erich Kosiol*	3.00
Macroaccounting, by S. C. Yu*	3.00

* In preparation.

FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING

VOLUME 8, NUMBER 2, SPRING 1973

THE INTERNATIONAL JOURNAL OF ACCOUNTING

EDUCATION AND RESEARCH

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

CENTER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING OF THE COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION

The Center for International Education and Research in Accounting was established to foster the international development of education and research in the accounting discipline, to provide a base for the international exchange of ideas and materials relating to accounting education, to encourage and assist both accounting faculty personnel and students from other countries to come to the University of Illinois at Urbana-Champaign for study and research in accounting, and to provide faculty members for assignment to universities in other countries.

The center, functionally and administratively, is a constituent part of the Department of Accountancy and the College of Commerce and Business Administration of the University of Illinois at Urbana-Champaign. The graduate training of a substantial number of international students has been an important activity of the department for many years.

One of the specific goals of the center is the publication of reports, booklets, and monographs which further the cause of advanced education and research in accounting.

V. K. Zimmerman, *Director*

The International Journal of Accounting *Education and Research* is published semiannually, spring and fall, by the Center for International Education and Research in Accounting, College of Commerce and Business Administration, University of Illinois at Urbana-Champaign. Subscription rates are $3.00 per year. Single copy price is $1.80. Copies of prior issues are still available.

Manuscripts and communications for the editor and business correspondence should be addressed to **The International Journal of Accounting** *Education and Research,* 320 Commerce Building (West), University of Illinois at Urbana-Champaign, Urbana, Illinois 61801.

THE INTERNATIONAL JOURNAL OF ACCOUNTING

EDUCATION AND RESEARCH

Volume 8 · Number 2 · Spring 1973

CENTER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

A Note from the Editor

With this issue, the *Journal* concludes its eighth year of publicatio
An index of the articles for the past two years, classified by author an
by topic, is included at the back of this issue.

In reviewing the articles published during this period, we are im
pressed with the general change in nature of the articles. We believ
this indicates a growing maturity of the literature descriptive of inter
national accounting. Articles which were primarily descriptive in na
ture were frequent in the earlier issues of the *Journal.* This type ap
pears less frequently now whereas articles concerned with contrastin
international theories and practices are more numerous. Although w
feel that descriptive articles at a certain stage are an essential an
helpful effort, we do believe the evolution noted above is logical an
reflects a growing recognition in this area of the accounting disciplin

We are pleased to note the wide range of national origins of th
authors included in recent issues of the *Journal;* we invite additiona
manuscripts.

V. K. Zimmerma

Urbana, Illinois
Spring 1973

Contents

Accounting and Society: A Behavioral View

CLARK E. CHASTAIN*

THE RELATIONSHIP BETWEEN ACCOUNTING AND SOCIETY

The rudiments of accounting developed in response to society's needs — the direct needs of the financial and commercial sectors and the indirect needs of the general public. The relationship between accounting and society is thus behavioral and we may characterize the evolution of the accounting profession as a series of responses to the collective expression of needs by individuals and groups, noting how accounting has met these needs. The responsiveness and growth of accounting have fostered the growth of commercial institutions and their contributions to the world.

This behavioral relationship between accounting and society is dynamic. As business institutions have changed and cultural developments occurred, society's needs for accounting information have changed and expanded. Accountants have usually reacted quickly and positively to these changing needs to keep the profession up-to-date and utilitarian.

The essence of the interaction between accounting and society has been expressed as follows:

> While it can be demonstrated that in its long history accounting continually reacted to, and was a product of, the environment in which it functions, could it not also be shown that as accounting was responding to the needs of society, it in turn was exerting an influence on the society it serves?[1]

---

* Clark E. Chastain received his undergraduate and master's degrees from the University of Arkansas and his doctoral degree from the University of Michigan — Flint Campus. Mr. Chastain has had experience with the Securities and Exchange Commission (SEC) and has contributed articles to leading accounting publications. He is also the author of *Teaching Undergraduate Tax Accounting in the 1970s.*

[1] James Winjum, "Accounting in its Age of Stagnation," *Accounting Review* (October 1970): 744.

Current Relationship between Accounting and Society

Ladd has described the present relationship between accounting and society.[2] He believes that the major objective of organizations is no longer profit maximization and that stockholder interests are no longer the primary responsibility of managers. Accounting principles, however, are still predicated on the premise that ownership interests are paramount.

In Ladd's opinion organizations' major objectives are to maintain their competitive position, to grow, and to be "good citizens;" that is, to respond to society's demand that they act as chief coordinators in using personnel, materials, and monetary resources to produce goods and services, and in distributing returns to contributors. Since organizations thus hold power over a large part of our national resources they have major responsibilities to society in general.

According to Ladd, however, accounting continues to be based on the older notion of profit maximization and fails to communicate the necessary and relevant information to society by which it can properly evaluate corporate performance. Ladd recommends a number of specific changes in accounting; the major one requires that current values be shown in balance sheets so that public and external users can best appraise an organization's growth and position.

Although accountants may disagree with Ladd's diagnosis of accounting's deficiency, few would question that the role of organizations has changed. Ladd's point is that accounting is the intermediary between organizations and society in the sense that it is the primary transmitter of financial information to external users. If the relationship between society and organizations has changed significantly, accounting has lagged by not responding to the altered objectives of organizations.

External accounting communication continues to be based on the premise that economic results are the major criteria for evaluating organizations, but many students of organizational theory consider social goals and their satisfaction to be of greater importance than economic goals. For the most part, however, accounting has not developed methods for measuring social progress and it does not report such results.

Generally Accepted Accounting Principles and Society

Hawkins has reviewed generally accepted accounting principles (GAAP) in relation to the behavioral criterion of how well they serve

[2] Dwight R. Ladd, *Contemporary Corporate Accounting and the Public* (Homewood, Ill.: Richard D. Irwin, Inc., 1963).

the interests of society.[3] GAAP should motivate managers in corporations to use most effectively the resources entrusted to them by society and to disclose the results of operations realistically, openly, and fully. Hawkins criticizes most strongly those principles that encourage inefficient behavior or that result in the communication of misleading results from operations. He believes that in a behavioral sense the external reporting system operates similarly to the internal management control systems. GAAP should be formulated so that they will motivate managers to make sound economic decisions and report these in a straightforward manner. So that society may make the most effective decisions in allocating resources, these principles should discourage corporate decisions that rely on misleading accounting methods.

Hawkins points out that while accounting is the major communication system between organizational management and society, society in turn communicates to managers and the accounting profession through its sanction of reporting principles. He states:

> Nevertheless, as difficult as it is to make our system more responsive, the messages carried by accounting principles from society to management can be clearer and closer to today's modes of thought if the groups charged with responsibility for maintaining our corporate reporting system recognize the two-way communication potential in our system and use it to the best of their ability to communicate society's goals to management.[4]

THE EVOLUTION OF ACCOUNTING: A BEHAVIORAL RELATIONSHIP

Double-Entry Bookkeeping, Capitalism, and Society

Ladd suggests that events in the Tigris-Euphrates valley some 5,000 years ago may have given rise to accounting.[5] A group of businessmen probably accepted capital from a third party not directly involved in the business, and the business acknowledged its responsibility to the capital investor, an outsider.

The subsequent evolution of accounting and the path of society's development may be viewed behaviorally. Each progressed as it reacted to the recent behavior and demands of the other. This interaction became very intense, involved, and complex at times; as a matter of fact, in the sixteenth century writers questioned whether double-entry bookkeeping was responsible for the development of capitalism or whether capitalism was the cause of double-entry bookkeeping.

The mathematical genius Luca Pacioli, generally considered the

---

[3] David F. Hawkins, "Behavioral Implications of Generally Accepted Accounting Principles," *California Management Review* (Winter 1969): 13-21.

[4] Hawkins, "Behavioral Implications," p. 16.

[5] Ladd, *Contemporary Corporate Accounting.*

first significant writer to expound on double-entry bookkeeping, pu lished his *Summa de Arithmetica, Geometrica, Proportioni, et Pr portionalità* in Venice in 1494.[6] Peragallo, in studying the developme of double-entry bookkeeping in Italy, questions whether it developed the thirteenth or fourteenth century and believes that Pacioli was n the first writer on the subject, but rather the first to gain recognitic outside Italy.[7] Bookkeeping as such developed independently at abo this time in a number of Italian cities, and spread to other countri in the sixteenth century as commerce began to expand.

B. S. Yamey has discussed some of the historical relationships th may have existed between business and double-entry bookkeeping He reviews the work of Pacioli, stating that it has apparently bee disproved that Pacioli developed double-entry bookkeeping and that one knows whether some other individual developed it. Yamey que tions whether double-entry bookkeeping is a reflection of the spirit the Renaissance, concluding that the dates do not indicate the develo ment of double-entry bookkeeping in this period. Some possible e planations for the development of double-entry bookkeeping are: was a change or accidental outgrowth from earlier bookkeeping met ods; it may have resulted from the need to keep contra entries in tv different accounts; it may have answered the need to record both po tive and negative transactions; or it was developed to satisfy new changing business needs.

Some writers have viewed double-entry bookkeeping as influential problem solving; for this reason its evolution facilitated the develo ment of business enterprise in particular and economic growth general. The German economic historian Werner Sombart, question the causal effects of accounting on modern capitalism:

> Double-entry bookkeeping is born of the same spirit as the systems of Galil and Newton . . . one can scarcely conceive of capitalism without double-ent bookkeeping: they are related as are form and content. It is difficult to d cide, however, whether in double-entry bookkeeping capitalism provided self with a tool to make it more effective, or whether capitalism derives fro the "spirit" of double-entry bookkeeping.[9]

[6] R. Emmett Taylor, "Luca Pacioli," in *Studies in the History of Accountir* ed. A. C. Littleton and B. S. Yamey (Homewood, Ill.: Richard D. Irwin, In 1956), pp. 175-84.

[7] Edward Peragallo, *Origin and Evolution of Double Entry Bookkeeping* (Ne York: American Institute of Certified Public Accountants, 1938).

[8] A. C. Littleton and B. S. Yamey, eds., *Studies in the History of Accounti* (Homewood, Ill.: Richard D. Irwin, Inc., 1956), p. 2f.

[9] Werner Sombart, *Der Moderne Kapitalismus,* vol. 2, 6th ed. (Munich: 1924 pp. 118-19.

Yamey, who quotes Sombart, believes that double-entry bookkeeping definitely aided the growth of capitalism, including its advances during the Industrial Revolution, but he concludes that the rise of modern capitalism did not derive from double-entry bookkeeping.[10] (In viewing the importance of accounting to capitalism, Max Weber defined a rational capitalistic establishment as one that uses modern bookkeeping to determine its earning power and to measure its progress.[11])

Accounting has been acknowledged as a strong influence in the development of capitalistic society because: (1) it reduces the idea of profit or gain to an abstraction, a necessity for distinguishing the concept of capital; (2) it provides business management with a rational framework to use as a guide, furnishing the entrepreneur with an information system for formulating plans, comparing performance, and planning future activity; (3) it promotes systematic organization, a vital ingredient in economic progress, by providing an information system and guidelines for behavior; and (4) it developed from and aided the mechanization and depersonalization of business, which accompanied the separation of entrepreneur-owner from the firm and its professional management.[12]

In summary, the development of accounting aided in the development of a social system and behavioral guidelines necessary to the evolution of an industrial society. Its importance in this regard, starting about 1500, has been emphasized by economists and historians. Most scholars concur in these interrelationships, although they do not agree about their importance and the causal nature of the different factors. Yamey, for example, after reviewing the relationship of early bookkeeping techniques to economic development, concludes that the actual role played by bookkeeping was more modest than that ascribed to it by Sombart and Weber.

Continuing Interaction

After double-entry bookkeeping was developed in Italy, accounting played an especially important role in trade and commerce in England beginning about 1500, assuming even more importance with the Industrial Revolution which started about 1800. In England the corporate

[10] Littleton and Yamey, *Studies in History,* p. 9.

[11] Max Weber, *General Economic History* (New York: Greenberg, 1927), p. 275.

[12] Based on a summary by B. S. Yamey in "Scientific Bookkeeping and the Rise of Capitalism," *Studies in Accounting,* ed. W. R. Baxter (London: Sweet & Maxwell Limited, 1950): 13-20.

form of organization and the use of par value capital stock developed, and the separation of the owner-investor from the operations of the organization was promoted. Littleton illustrates the form and arrangement of financial statements that accountants had developed by the end of the eighteenth century.[13] As early as 1788 the profit and loss sheet and the balance sheet were presented in a form very similar to what is used today.

Littleton asserts that bookkeeping was expanded to provide the foundation of modern accounting in the nineteenth century. Its expansion and development into a profession resulted from the influence of the corporation, the growth of industry, advances in the theory of account, the increased use of accounting as a business control, the dependence of courts, legal usage which placed much importance on accounting, the emergence of auditors or independent accountants, and some developments in cost accounting. As it evolved in this period of revolutionary economic strides accounting permitted significant systematization in business organizations and made possible great increases in the quantity of goods and services available to society. The emergence of complex organizations and an advanced economic system interacted to place strong demands on accounting. Specialization in accounting functions resulted and the profession substantially improved its services to users and society in general.

John Bauer described the interaction between accounting and business:

> Progress in the science and technique of accounting has made possible an increase in the size, complexity, and territorial scope of business operations. Consequently, these changes have spurred the advance in accounting knowledge and technique. The kind of records that are needed depends upon the business, but the kind of business that is possible depends upon the records that have been kept.[14]

Littleton refers to this interaction as a central element of progress:

> Thus surrounding conditions generate fresh ideas and stimulate the ingenious to advise new methods (of accounting). And as such ideas and methods prove successful they in turn begin to modify the surrounding conditions. The result we call progress.[15]

---

[13] A. C. Littleton, *Accounting Evolution to 1900* (New York: American Institute of Certified Public Accountants, 1933), pp. 142-43.

[14] John Bauer, *Encyclopaedia of the Social Sciences,* vol. 1, p. 404; quoted by Littleton, *Accounting Evolution,* p. 361.

[15] Littleton, *Accounting Evolution,* p. 361.

Development of Public Accounting

The development of public accounting and the licensing of the certified public accountant are responses to strong social and business needs. The social changes have been associated with the mass trend toward the separation of owners and management. Business has demanded the fair presentation of the results of operation and the financial condition of public enterprises, especially the large ones.

In the introduction to his comprehensive work on the history of the public accounting profession in the United States, Edwards states his hope that the book will lead to further study of the independent CPA's impact on business development in the United States.[16] He sketches the background of the profession's development in Britain, observing that the first major recognition of a public accountant was extended to Charles Snell, who examined the books of the South Sea Company in 1720 upon request of the English Parliament. Public accountancy grew rapidly in England, Scotland, and Wales during the nineteenth century in response to diverse business needs, the growth of state-chartered companies, and the various legal acts and public requirements for audits and financial reports.

Edwards refers to early works of public accountants in the United States, one of which was an accounting carried out for Benjamin Franklin in 1748. Accounting firms began to form in the late nineteenth century and New York State first granted legal recognition to the CPA in 1896. Throughout the book Edwards emphasizes the growth of the public accounting profession in this country as it "found a constantly enlarging sphere of usefulness to the businesses . . . and to the public. . . ."[17] Central to the profession's development has been its response to new and changing business needs. Conversely, the services of independent public accountants have significantly influenced much of the growth in business, the types of organization used, business practices, and our monetary institutions' state of development.

Accounting and the Business Environment

One aspect of the behavioral relationship between accounting and society can be seen by studying the social and business environment — institutions that manage resources, their practices, and the values of the individuals concerned.

---

[16] J. D. Edwards, *History of Public Accounting in the United States* (East Lansing: Michigan State University, 1960).
[17] Ibid., p. 100.

Leo Herbert, a prominent accountant, has recently traced the interaction between accounting and the business environment in the United States.[18] Prior to 1850 America was essentially agricultural; most businesses were small, often individually owned and operated. Society demanded that accounting provide a statement of assets and also some auditing to ensure accuracy and to prevent fraud in records and accounts. Independent accountants did not exist.

The investment of substantial foreign funds in the United States following the Civil War, however, changed this. This new arrangement required stewardship accounting for assets and measurement of income so that foreign investors might know and evaluate the progress of an enterprise. Absentee ownership gave rise to a new and perhaps one of the most important concepts in accounting: the representation of the absentee owners, who were independent of and removed from management, by professional accountants.

> In the latter part of the 19th century, considerable amounts of British capital began to be invested in breweries, railroads, and other businesses in the United States, and the absentee owners often sent accountants to check on their distant interests. Many of the Englishmen and Scots who came on these missions remained in America, and they played an important part in stimulating and shaping the profession here.
>
> In 1896, New York became the first State to enact a law providing for certification of public accountants who met certain standards. Other states later adopted similar legislation.[19]

Herbert points out various subsequent historical developments in the interaction of business and accounting. First, the demands of absentee owners resulted in governmental interference in business operations through antitrust, transportation, labor laws, and the like.[20] The expansion of government activities created a need for more federal funds and the result was the federal Income Tax Act of 1913, which in turn led to significant improvements in accounting. Then, due to the need for costly military items, World War I gave impetus to the development of cost accounting, which had previously been a nonaccounting function used in measuring production costs. The establishment of the Securities and Exchange Commission (SEC) in 1933 was prompted by a demand from the investing public for improvement in financial re-

[18] Leo Herbert, "A Perspective of Accounting," *Accounting Review* (July 1971): 433-40.

[19] American Institute of Certified Public Accountants, "Designers of Order: The Story of Accounting Briefly Told," *Journal of Accountancy* (July 1970): 63.

[20] Much of this section has been adapted from Herbert, "A Perspective of Accounting."

porting. This greatly increased the importance of the public accountant and resulted, in large part, in recognition of generally accepted accounting principles. The emphasis on growth in the economy of the 1950s may be related to managerial efficiency and the development of managerial accounting.

The General Accounting Office, internal auditors, management consultants, and public accounting firms' management review audits evolved from the close association of accountants and management. Today pressures for efficient use of human resources and social demands for self-esteem and the fulfillment of individual needs in organizations are resulting in a reevaluation of management philosophy, organizational behavior, the relationship between individual and organizational goals, and the relationship between accounting and individuals. These forces are producing experimentation with human resource accounting and inquiry into the behavioral implications of accounting.

We have seen how accountants have responded to changes in society's needs in general and to the changing needs of a number of its sectors — commerce, industrial transportation, utilities, banks, government, and so forth. In turn, much of society's activity has been conditioned by the accomplishments of accountants. Certainly accounting services have made possible much of the progress achieved by social institutions. Many of the developments in social institutions and in the accounting profession may be understood best in terms of behavior — a change in one element resulting from a need expressed by the other and a shift in needs and their satisfaction, leading to counter-responses and further developments.

ALTERNATIVE ACCOUNTING METHODS: EFFECTS ON THE BEHAVIOR OF THE ECONOMY

For some time there has been controversy over the effect of certain accounting methods on the economy. Because the economic sector is a large and influential part of society its relationship with accounting is discussed in this section and the impact of varying accounting methods on economic activity is analyzed.

Accounting for inventories has been considered a major accelerative factor when business is expanding and prices are rising. A simple illustration will indicate what some authors have termed *inventory* or *fictitious profits,* which arise solely out of a particular method of accounting. Assume that the first-in, first-out (FIFO) method of inven-

tory is used and that our beginning inventory consists of one unit at a cost of $1.00. During an accounting period we sell the one unit for $2.00 and purchase a replacement unit for $1.50, the new replacement price. The ending inventory of one unit is the same as the beginning, but it is stated at a larger dollar amount ($1.50). The reported gross profit is $1.00. According to Henry B. Arthur, an economist who has studied and written on inventory profits, the real profits are only $.50 (the sales revenue in excess of the carrying amount for the same physical quantity of ending inventory). The other $.50 is paper or fictitious profit because it arose from appreciation in inventory prices.[21]

The inventory gain of $.50 does not represent disposable cash but rather an unrealized gain and it cannot be realized if prices should fall before it can be sold. Arthur argues that it is misleading to inflate profits when prices are rising and then to understate them or increase losses by writing inventories down when prices fall.

> These inventory profits may be called unrealized inventory profits — that is, profits represented by unsold inventories rather than cash. In fact, to a going concern, most of the inventory profits are not only unrealized but they are also unrealizable if the concern is to continue in business. Even though inventories are constantly being turned over, a certain quantity of inventories is a part of the capital equipment of the business. Increases or decreases in inventory values are analogous in every essential to unrealized capital gains or losses. Inventory profits, as here defined, cannot be converted into cash profits without a net liquidation of inventories.[22]

He observes that accountants, statisticians, and economists unfortunately treat inventory profits as a part of current and of national income.

> It is a comparatively easy matter to eliminate unrealized inventory gains and losses from statements of business income, but the methods for accomplishing this have not received any general acceptance. Businessmen make their decisions as though fictitious inventory gains (amounting in some years to several billions of dollars) were expendable, and the effect of this misunderstanding is to aggravate the cyclical fluctuations of business. The elimination of fictitious gains and losses, from current income statements would be an important contribution toward moderating cyclical extremes.[23]

---

[21] Henry B. Arthur, "Inventory Profits in the Business Cycle," *American Economic Review* (March 1938): 27-40.

[22] Ibid., p. 28.

[23] Ibid., p. 28; for other articles on the subject see Ross G. Walker, "The Base-Stock Principle in Income Accounting," *Harvard Business Review* (Autumn 1936); George E. Putnam, "The Role of Paper Profits in Industry," *Harvard Business Review* (January 1926); and H. T. Warshow, "Inventory Valuation and the Business Cycle," *Harvard Business Review* (October 1925).

Arthur states that the commonly used practice of the lower of cost or market has the same expansive effect on business cycles as does any method of accounting that does not disclose inventory profits.

> The false guides provided by the conventional income statement in times of rising or falling prices help to carry business psychology to extremes of over-optimism in periods of price advance and drag it to the depth of despair when prices fall.[24]

Dysfunctional effects in the economy do not stop here for the resulting instability provides more uncertainty in business decisions. Arthur points out that accounting records thus provide poor guidelines for realistic decisions and management. He also points out that over the business cycle inventory losses equal inventory gains. He believes that the inventory profits are really unrealized capital gains and that the Internal Revenue Service (IRS), in taxing these at current income rates, is dissipating corporate capital. To the extent that a corporation is pushed into a higher tax bracket because of inventory profits, IRS receives a permanent increment in its tax take over the cycle. And, in effect, corporations make an interest-free loan to the IRS by paying taxes on inventory profits during upswings in business until times of recession.

Arthur discusses the merits and disadvantages of three accounting methods that alleviate pressures on the business cycle: (1) base-stock, (2) last-in, first-out (LIFO), and (3) inventory reserve. He concludes that base-stock and LIFO tend to eliminate inventory profits, to contribute to business stability, and to promote more orderly decisions by business management. Technically, use of the inventory reserve — placed on the liability side of the balance sheet and credited with the amount of inventory profits — accomplishes the same thing as LIFO.

Writing eleven years later, Professor J. Keith Butters pointed out that FIFO distorts national income accounts because it measures sales in the prices of a given year, say 1971, and measures the cost of sales partly in 1971 and partly in 1970 prices.[25] The Department of Commerce computes the inventory valuation adjustment in order to place all business costs on a current basis. Butters mentioned an additional consideration: during price rises, income is increased by inventory profits, taxes are higher, and businesses are in a higher cash position, while the opposite picture results when prices are falling. Thus Butters

[24] Arthur, "Inventory Profits," p. 35.

[25] J. Keith Butters and Powell Niland, *Effects of Taxation: Inventory Accounting and Politics* (Cambridge: Harvard University, 1949).

modifies Arthur's statements but his general conclusions regarding the effects of inventory profits are similar.

Butters showed that, quantitatively, inventory profits are very significant at the national level. In 1946 they approached one-half of corporate income after taxes and around 70 percent of undistributed corporate profits. He concluded that society would benefit from inventory methods excluding the effects of inventory profits and losses from income, although he was cautious in stating his conclusions. He found that business decisions on borrowing, dividend policy, wages, size of inventory holdings, plant and equipment acquisitions, pricing, and inventory expectations are adversely affected by inventory profits that exaggerate economic booms and recessions.

Alan R. Cerf more recently studied the impact of different inventory valuation methods on organizations and on the economy.[26] The effects are greatest when the rate of price changes is high. Alternative inventory methods produce the greatest differences in the amount of ending inventories, cost of goods sold, tax liabilities, and profits after taxes during periods of rapidly advancing prices. Cerf illustrated these differences in models he prepared for World War I and the 1945-48 period in which tax payments were higher by 16.4 percent and 14.8 percent, respectively, using FIFO instead of LIFO.[27]

The significance of alternative inventory methods for an organization depends on the rate in price change, the rate of inventory turnover, and the markup percentage in the selling price of inventory. The use of the lower of cost or market during an inflationary period produces higher reported profits, higher inventory figures, and higher tax payments; during a recessionary downswing, writing carrying values down to replacement cost leads to lower profits and reduced tax liabilities for the specific year. Usually the impact on both the economy and the firm under alternative inventory methods does not cancel out over the business cycle because the cycle is not symmetrical. Tax rates may change; inventory prices usually do not return to their previous low cash position and their effect on the economy changes; and the interest saved on tax deferrals may be a permanent gain.

In contrast, alternative accounting methods of expensing outlays when they occur as opposed to capitalizing them may tend to lead to

[26] Alan R. Cerf, "Inflation, Inventory Valuation Methods, and Business Cycles," *Accounting Research* (October 1956): 344-55; and Cerf, "Price Level Changes, Inventory Valuations, and Tax Considerations," *Accounting Review* (October 1957): 554-65.

[27] Cerf, "Price Level Changes," p. 557.

higher expenses in times of business expansion. Such results would have a stabilizing effect on the economy by reducing profits in the boom years. Some specific types of outlays where alternative practices of accounting are used include those for organizational development, research and development, personnel improvement, some intangibles such as goodwill, and some fixed asset acquisitions.

Although it is not clear whether alternative accounting methods always influence society and its behavior through an effect on the economy, in some cases the evidence of its influence is clear. More study and experimentation are necessary to indicate how extensive some of the effects are. By observing the action taken in conjunction with a given accounting method, studying the reaction produced, and measuring its effects, a behavioral approach is ideal for studying the relationship.

ORGANIZATIONS AND THE ENVIRONMENT: BEHAVIORAL EFFECT ON ACCOUNTING

The behavioral relationship between accounting development and social demands is illustrated most clearly today by the attention given to controlling the environmental effects of organizations.[28] The concurrent change in management's behavior and attitude toward social responsibility is significant. In the past, maintaining the environment at a desired social level has been considered a public, not private, cost. This philosophy is changing because of government regulation, changing values held by the public in general, and, in part, voluntary efforts by firms. Two authors have urged that pollution control costs should be reported in the financial statements of organizations because of social cost conversion:

> Accounting as an organized profession has the responsibility to transcend the internal viewpoint of a private firm and to develop information which portrays a private firm's role in and contribution to society. Accounting information should lead to decisions that result in the efficient utilization of resources, the conservation of the environment and the equitable allocation of business income.[29]

The increased interest in maintaining and improving the environ-

---

[28] The Committee on Ecology of the American Institute of Certified Public Accountants and the Environmental Effects of Organization Behavior Committee of the American Accounting Association are now studying this area.

[29] Floyd A. Beams and Paul E. Fertig, "Pollution Control through Social Cost Conversion," *Journal of Accountancy* (November 1971): 37; see also "Changing Times," *Wall Street Journal,* October-December 1971, a series of seven articles dealing with the role of business during a period of social revolution.

ment is widening the audience for accounting information. Direct users of financial statements — managements, suppliers, taxing authorities, employees, and customers — need financial data on environmental problems to make decisions and to understand and evaluate the reported information. Indirect users who often require environmental effects data from organizations include financial analysts, stock exchanges, lawyers, regulatory authorities, financial reporting agencies, trade associations, and labor unions.[30]

Almost every group in society is asking for ecological information. The audience includes schools, churches, social and charitable organizations, housewives, minorities, the disadvantaged, politicians, students, environmental control officials, and others. Some of the information needs include:[31]

1. What television shows the firm sponsored and the reason for the particular choice;
2. Pollution control programs and expense;
3. Smog prevention programs and expense;
4. Water purification research costs;
5. Cost of programs oriented to the disadvantaged;
6. Cost of developing antipollution devices;
7. Expenses of employee education;
8. The firm's pollution emissions and control program; and
9. Violations of pollution laws.

Needs for Environmental Effects Information

Compliance requirements and abatement in particular need to be reported so that stockholders and potential investors may make comparisons among organizations and industries. Environmental control officers at all government levels — community, municipal, county, state, and federal — have specific needs for information on environmental effects. Creditors, including bankers, are vitally interested in environmental information that may affect the organization's liquidity or its ability to service and repay debt.

The pressures being placed by investors on organizations for social improvement and for accounting to disclose this information are evident from a quotation of the Dreyfus Fund:

---

[30] For a discussion of user groups of financial statements and their needs, see Accounting Principles Board Statement no. 4, "Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises," American Institute of Certified Public Accountants, October 1970, chap. 3.

[31] Glenn A. Welsch, "Some Evolving Issues in Financial Reporting," *Virginia Society of Certified Public Accountants* (1970): 7.

The Management of the Fund believes that investment by the private sector can become a positive force to encourage social progress in America. The Fund will invest in companies which, in the opinion of the Fund's Management, not only meet traditional investment standards, but also show evidence in the conduct of their business, relative to other companies in the same industry or industries, of contributing to the enhancement of the quality of life in America as the nation approaches the Third Century of its existence. In making this latter assessment, the Fund intends, as a matter of fundamental policy, to consider performance by companies in the areas of (1) the protection and improvement of the environment and the proper use of our natural resources, (2) occupational health and safety, (3) consumer protection and product purity and (4) equal employment opportunity. In addition, special consideration will be given to those companies which have, or are developing technology, products or services which, in the opinion of the Fund's Management, will contribute to the enhancement of the quality of life in America. The Management of the Fund further believes that the foregoing special standards are relevant to attaining the Fund's primary objective of capital growth in that the Management of the Fund believes that the ability to meet these standards will generally be an indication of companies which are well managed and which, therefore, present opportunities for capital growth.

The Management, initially guided by legal requirements which prescribe standards of commercial and social conduct in the areas of concern to the Fund, has developed, and is continuing to develop, techniques for measuring relative performance in these areas. It must be recognized, however, that there are few generally accepted measures of performance in these areas, and that therefore the development of suitable techniques to measure such performance will be largely within the discretion and judgment of the Management of the Fund. Currently, development of these techniques and evaluation of companies with respect to these areas are the responsibility of a full-time special research staff of the Management.[32]

The needs of other statement users for information on environmental effects are similar to those of investors. Regulatory agencies and officers require such information to indicate the status of statutory compliance and the related economic costs. Complete disclosure of pollution data is needed so that financial statements will be comparable between firms and industries. Organizations within industries are devoting funds and effort to control pollution in greatly varying amounts. Some companies are controlling pollution at the legally required and acceptable level or even higher, while others are largely ignoring current requirements. Furthermore, some firms and some industries pollute the environment much more than others. Thus financial data vary by organization, by industry, and by location.

Unfortunately, traditional reporting, which largely excludes complete information on environmental effects, often shows that the firm

[32] Dreyfus Third Century Fund, Inc., preliminary prospectus, February 22, 1972.

most polluting and exploiting its environment is most successful. Such a firm may have a minimal pollution abatement program or none at all. The firm that is conscientious in its pollution abatement program may show lower net income, lower working capital, and other financial results that make it appear less successful by contrast.

Significance of Environmental Effects Information

The significance of the social costs of environmental effects data is important and increasing. Marshall Goldman estimates that the annual operating costs of pollution control alone will run from 1 to 2 percent of gross national product and 10 percent of total expenditures for some companies.[33]

Another observer estimates that pollution control expenditures by industrial firms will run from 3 to 5 percent of total capital investment of $70 billion, or up to a maximum of $3.5 billion, in 1971.[34] For 1972-76, capital spending on abatement of air and water pollution is expected to run close to $20 billion.[35] For the steel industry, spending for pollution control has been reported to run as high as 25 percent of total capital investment.[36]

These data indicate the relative importance and size of expenditures on environmental control. There is a strong need for their disclosure in financial statements.

Impact on Accounting

The need for environmental financial data is affecting all areas of accounting. Uniform financial reporting requires that complete accrual accounting for assets, costs, expenses, and liabilities be adopted.[37]

There are several reasons why the independent public accountant is under pressure to extend his audit program and procedures and to attest to environmental information. One, society and business are moving toward general acceptance of the philosophy that costs of conserving the environment are the organization's private production costs; the traditional view that they are social public costs is becoming obsolete. Two, accounting has evolved to its present status as a profes-

---

[33] Marshall I. Goldman, "The Costs of Fighting Pollution," *Current History* 59, no. 348 (August 1970): 81.

[34] "Pollution Price Tag: 71 Billion Dollars," *U.S. News and World Report* (August 17, 1970): 14.

[35] Gene Bylinsky, "The Mounting Bill for Pollution Control," *Fortune* (July 1971): 87.

[36] Ibid., p. 130.

[37] Beams and Fertig, "Pollution Control," p. 40.

sion because it has met the need to measure and communicate financial information to society. To continue receiving professional endorsement from society, accounting must communicate information on ecology needed by interested parties. Three, legal requirements regarding pollution compliance already in existence and those yet to be enacted cover areas of prime importance to financial statements. Information for asset valuation, costs, expenses, outlays, and liabilities must be measured and disclosed so that the statements are accurate and acceptable. It is probable that within a short time reporting of environmental information will be part of generally accepted auditing procedures and accounting practices.

Public accountants, in their management services and advisory roles in business, have new challenges for helping management cope with accounting and financial problems, especially internal and regulatory ones, arising from environmental standards. Among needed services are: (1) consultation on complying with environmental standards, design of environmental information systems, cost and operation analyses of different methods of pollution abatement, cost and expense projections for alternative abatement programs, projections about the effects on pricing decisions, and preparation of data for interim and long-term financing and pro forma statements; (2) forecasts and budgets that include pollution outlays, expenses, and cash flow; and (3) presentation of expert testimony to environmental control officials and in litigation.

Solving environmental problems requires the help of all professional disciplines. Organizations need the multifaceted skills, experience, and background of accountants in management services to cope with the current complex problems in environmental control. Indeed, the pollution problem is indicative of more general pressures on accountants because of social change. Society is demanding more and more urgently that accountants share their contribution with other professional disciplines to solve other difficult social and economic problems. Commenting recently on the issue, Elmer B. Staats observed that accountants will need to work with "scientists, computer analysts, engineers, medical practitioners, systems analysts, mathematicians, economists, sociologists, statisticians, actuaries, and the like" in the 1970s.[38]

---

[38] Elmer B. Staats, "The Role of the Accountant in the Seventies," *Management Accounting,* National Association of Accountants (April 1972): 13-14. See his discussion of how the U.S. General Accounting Office is faced with this interdisciplinary problem in studying costs under the Health Professions Act of 1971.

Managerial accountants are concerned with many of the problems already mentioned, especially those relating to the preparation of financial statements and to the various studies dealing with environmental control. Environmental costs, which were formerly social costs, must be incorporated in product costs. They must be incorporated in standard costs, budgets, and forecasts, and they must be considered in cost studies for new plant locations.

Accountants must be able to determine the costs involved in achieving various levels of environmental compliance, particularly the required level, and to compute these costs for different technical methods of compliance. Control costs must be determined for various possible levels of cost-profit-volume. Costs associated with irresponsible managerial action or noncompliance — penalties, fines, property damage, litigation, shutdowns, and excessive production costs — should probably be accounted for as losses and not as production costs.

Current and Future Status of Reporting

Most companies are currently reporting descriptive data on environmental effects, but almost all of them include the information in the president's letter to stockholders or in the body of the annual report. Only a very small minority discloses such information separately in the financial statements or in the footnotes and supplementary data to the statements.[39] Consequently the independent certified public accountant is not attesting to the disclosure of the data in most reports.

In those cases where the information is disclosed in the financial statements, most disclosures are of contingent liabilities related to compliance with regulatory environmental standards, and very few are made separately or formally. For example, the International Paper Company in 1970 reported earnings before extraordinary items of \$82.5 million and then deducted an extraordinary item from this of \$39.6 million (net of applicable income tax), and reported net earnings after the extraordinary item of \$42.9 million. The extraordinary item was in part for losses on the expected abandonment of facilities that management believed could not economically be brought up to environmental standards.

A significant shift toward reporting environmental data in the financial statements is expected, however. The SEC now requires dis-

[39] Norman Pope, "Accounting for Pollution Costs" (Master's thesis, Texas Technical University, 1971); American Institute of Certified Public Accountants, *Accounting Trends and Techniques* (New York: American Institute of Certified Public Accountants, 1961), pp. 187-88; and an examination of 1971 filings with the U.S. Securities and Exchange Commission.

closure of environmental information that "may necessitate significant capital outlays, may materially affect the earning power of the business, or cause material changes in registrant's business done or intended to be done,"[40] and there also appears to be strong pressure by users for more full and separate disclosure of such data as well as for other predictive information. These pressures may bring about significant changes in the current reporting model used in financial accounting.

Extension of the Accounting Model

Society is having a strong behavioral effect on organizations through the enactment of environmental standards. Costly efforts to maintain the environment, which were once left to social, community, or other governmental units, or were ignored completely, are becoming organizations' private production costs. Approval of this development has been voiced by President Nixon: "To the extent possible, the price of goods should be made to include the cost of producing and disposing of them without damaging the environment."[41] Society is placing pressure on organizations by allocating its investment resources to those that are socially conscious and committed to improving the quality of life. The major objective of users of financial statements is to obtain information that improves their prediction of a firm's success.

Some investors today rank social awareness along with economic achievement as a major standard of a firm's performance. Pressure is mounting for the presentation of both short- and long-run budgets, forecasts of the organization's sales, and future cash flows.[42] Some investors go so far as to demand that independent accountants attest to these data for the future.

The social data for which demands are emerging include descriptive information and, where appropriate, quantitative disclosure of the firm's efforts in environmental control; desirable use of natural resources; health and safety of industrial employees; protection of the consumer; upgrading of product quality; and lack of discrimination among all groups in employment. This new emphasis on an organization's activities to improve the quality of life leads to measurement and disclosure problems that will probably fall to the accountant and will probably also require an extension of the current reporting model.

---

[40] Securities Act of 1933, Release No. 5170, July 19, 1971.

[41] 1970 State of the Union Message.

[42] See *A Report of the Committee on External Reporting, Accounting Review* (Supplement to vol. 44, 1969): 78-123; Wesley B. Edgar, "Cash-Flow Statements for Current and Projected Periods," *Journal of Accountancy* (November 1971): 85-87.

A. Wayne Corcoran and Wayne E. Leininger, Jr., have proposed that the extended model include an Environmental Exchange Report,[43] a statement that would include input and output data on the human, physical, and financial resources that the firm was committed to and used for improving environmental quality. Human resource data would include provisions for health, welfare, and safety, and for meeting of individual goals in the organization. Physical resources would be listed by inputs and exchange outputs, including air, water, and raw materials, and the description of the physical products marketed would include their effect on the environment. Environmental factors would be described in significant detail, according to the Corcoran–Leininger plan. The exchange of financial resources for environmental purposes could be incorporated in the Changes of Financial Position Statement (Funds Statement) but separately disclosed.

Many questions arise regarding the extension of the present accounting model. What will be its scope in disclosing prospective data? Will a separate statement evolve for environmental resources and activities or will a new statement evolve that affords broader disclosure of resources and commitment to the overall improvement of society and the quality of life? For how much of this will the accountant be responsible, and will the independent practitioner attest to some or all of these evolving items?

Society's pressures on organizations to improve the quality of life and to communicate related efforts to statement users place the behavioral relationship between society and accounting under stress. This stress is strong enough to change the relationship, affecting the activities of accounting today and influencing its future direction as well.

It seems most likely that the accounting profession will handle these new demands adequately by extending its services and its traditional model of communication, and that as a result accounting itself will progress through further significant development. The cycle of the interdependent behavioral relationship that we have been examining will surely continue. We can expect society to respond to the progress in accounting with its own future changes and advancement.

---

[43] "Financial Statements — Who Needs Them?" *Financial Executive* (August 1971): 45-47.

Accounting Control through Purposive Uniformity: An International Perspective

DHIA D. AL HASHIM*

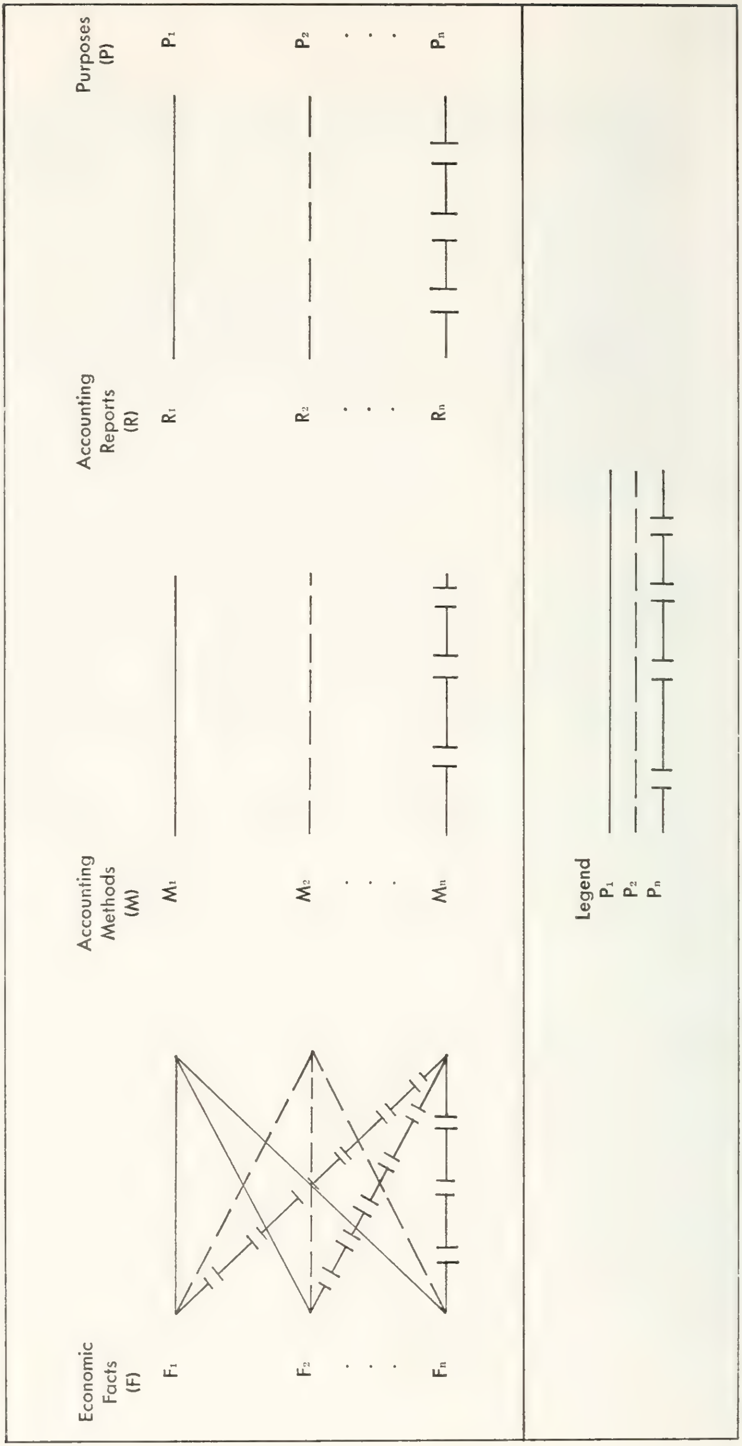
Purposive uniformity is a system of accounting control in which the interpretation of economic events and the prescription of accounting methods and reports are responsive to definitive user needs.[1] Purposive uniformity is represented schematically in exhibit 1. As illustrated, if purpose changes (e.g., from P_1 to P_2), economic events can be defined differently and alternative accounting methods and reports prescribed. For each purpose (need) to be served there is a uniform set of accounting standards and procedures; different purposes demand different uniform sets of accounting standards and procedures.

The concept of purposive uniformity is utilitarian; the uses of accounting information determine the appropriate accounting methods and standards to be used. Examples of such methods and standards are different accounting methods for pricing inventory (such as first-in

* Dr. Dhia D. AlHashim is an associate professor of accounting at Florida International University, Miami. An earlier draft of this manuscript was presented at the International Seminar on Universal Standards and Conventions in Accounting, Turin, Italy, December 8, 1971. The author gratefully acknowledges the helpful comments of Deans John W. Buckley, University of California, Los Angeles and V. K. Zimmerman, University of Illinois at Urbana-Champaign, with regard to an earlier draft.

[1] Purposive uniformity is defined and contrasted with other accounting control models in John W. Buckley and Dhia D. AlHashim, "Four Accounting Control Models and the Concept of Purposive Uniformity" (UCLA: Accounting-Information Systems Research Program, Working Paper 71-2, February 1971); and in John W. Buckley and Theodore J. Mock, "A Purposive Accounting Control Model" (UCLA: Accounting-Information Systems Research Program, Working Paper 71-5, March 1971).

Exhibit 1. The Purposive Uniformity Model



first-out, and last-in first-out) for different cost flows, and different accounting standards (such as the historical-cost standard and the replacement-cost standard) for different needs or uses (preparing financial statements for investors, management, etc.). This concept suggests that truth in accounting can be found only in the relevance of the control process to the needs of users.[2] If accounting meets the needs of its users, however defined, it has achieved its purpose.

Parties with potential influence on the problem of uniformity, although not always in this order, are: accounting practitioners (Upr); policy makers (Upm); research-theorists (Ur); users (external) (Uu); and enforcers (Ue).

The hierarchy of parties with respect to utility under the purposive uniformity model is shown in exhibit 2. The users and enforcers of accounting information occupy a high position on the utility scale of this model. Because the policy makers of this model are primarily regulators of accounting information, they too occupy a high position on the scale.

The next position is occupied by researcher-theorists, who provide feedback on the feasibility and practicability of different uniform sets of accounting standards. Practitioners occupy the final position on the scale, a position justified by the lack of practitioner involvement in the policy-making structure of accounting under this model. Practitioners serve primarily as technicians, not as policy makers, researchers, or enforcers.

The principal methodology of the purposive uniformity model is deduction. The deductive approach uses logic to formulate accounting standards. Authoritarianism is likely to accompany deduction in this model, since the right to make authoritative pronouncements is vested in the users who would elect policy makers (in a free enterprise system) and assist in administering and enforcing accounting standards (see exhibit 3). This would be augmented by induction, consisting of systematic studies of user behavior. The model would be highly responsive to changing user needs; methods and reports would all be subject to change with changing user needs.

---

[2] The concept of purposive uniformity is akin to an emerging philosophy of religion referred to as "situational ethics," which proposes that good or bad behavior is differentiated by the criterion of its relevance to a given understanding. For example, if an understanding exists among contractors that completion of projects is anticipated by several days, then being several days late within that framework of understanding is appropriate behavior. In this context a person who acts in strict conformity with a rule that violates the spirit of an understanding would be acting improperly.

Exhibit 2. Hierarchy of Parties with Respect to Utility Under the Purposive Uniformity Model

High Utility										Low Utility
10	9	8	7	6	5	4	3	2	1	0
	Uu and Ue		Upm		Ur			Upr		

The purposive uniformity concept describes regulatory practice in the United States and underlies accounting in most socialist countries; hence, experience in developing and operating this concept is available.

TWIN CONDITIONS FOR PURPOSIVE UNIFORMITY

Since purposive uniformity puts a premium on user utility, it follows that accounting control must rest with users rather than with providers of accounting information. This becomes a necessary condition for purposive uniformity and it is allied to another prerequisite, the ability to make user needs operative in order to call into action the appropriate accounting control responses. Vague specifications such as "users need more information" are simply insufficient for purposive uniformity. More precise articulation of needs is necessary.

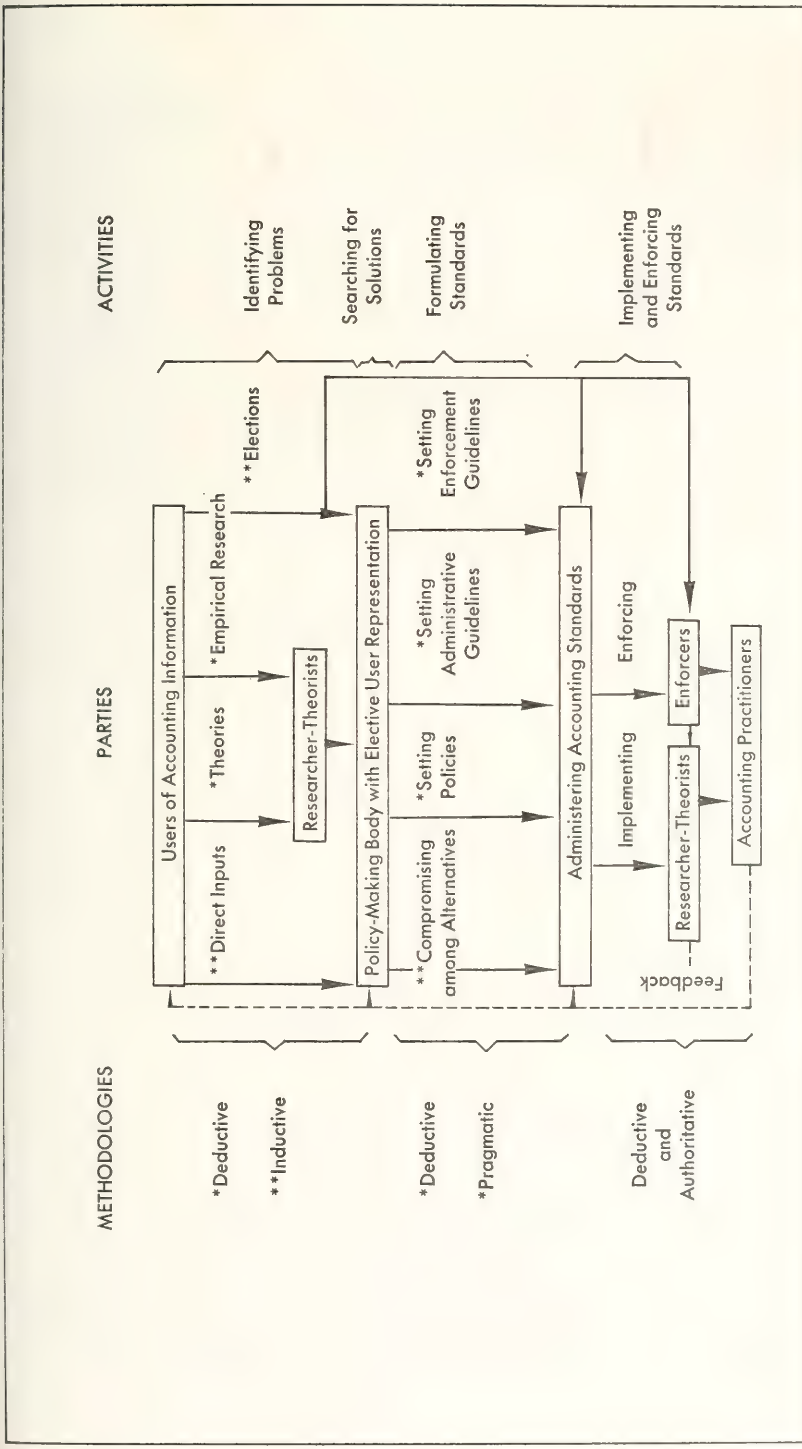
AN INTERNATIONAL PERSPECTIVE

Most accounting systems serve a variety of user groups. To the extent that users are also regulators, purposive uniformity is present. Management accounting is a case in point. Managers are both users and regulators regarding management accounting. They call upon accountants to furnish the information perceived necessary to function effectively. They may change economic events, as in simulations, or accounting methods and reports as their purposes dictate.

Tax accounting is another example of purposive uniformity because economic events as well as accounting methods and reports are defined in terms of tax policies. Users of this information (government), are also regulators. Regulatory agencies in the United States furnish us with additional examples of purposive uniformity.

In that broad sweep of accounting activity underlying the macroeconomic and investment structure of the United States, purposive uniformity is absent except for an embryonic development in the Se-

Exhibit 3. Structure of a Free Enterprise Purposive Uniformity System



curities and Exchange Commission (SEC). The users of accounting information for economic planning and investment are not the regulators or administrators of accounting control.

This is in sharp contrast to some other countries, including though not exclusively, socialist ones. There is a growing realization that accounting control in the United States is changing (hereafter, the use of the term *accounting control* will be limited to its role in macroeconomics and investments) and one predicted outcome is that a government agency will act as a surrogate for the user classes in question.

It is in this setting that the author will discuss the role of purposive uniformity in the United States, including comments on its application in Germany, France, Egypt, and Iraq, and drawing inferences pertinent to accounting control in the United States. But first the climate in which nonpurposive accounting control has flourished in the United States until recently will be considered.

NONPURPOSIVE ACCOUNTING CONTROL IN THE UNITED STATES

The foundation for nonpurposive accounting control in the United States has been the traditional economic theory that the rationality of the consumer enabled him to discriminate wisely among alternatives. Accordingly, caveat emptor prevailed.

While the traditional model has been laid to rest in economics, it persists in accounting. The rationality of the *economic man* made it less urgent for others to organize his environment — he could take care of himself. In the context of accounting, he spoke the language, understood the rules, and was able to sort fact from fiction. But as the environment became more complex, his rationality was stretched beyond the point of utility.

Most modern economic models allow for irrationality on the user's part. This has led to a role-reversal: as the *rational man* has become the *irrational man* so the irrational environment is becoming the rational environment.

The scope and complexity of current economic opportunities are such that the rationality of the *complete man* is no longer a convincing thesis. Rather, economic man in this turbulent setting requires a rationalizing intermediary that can perform the screening function which has surpassed his limited ability.

While this trend is obvious in the socialist movements of the twentieth century, including those within the major democracies, accounting theory for some reason is still wed to the economic thought of the nineteenth-century traditionalists.

The transformations of economic thought are beginning to quicken the pulse of accounting thought. Purposive uniformity is philosophically tied to the concept of irrational man, which calls for greater organization of his environment.

The conduct of purposive uniformity in the four countries mentioned previously will now be considered. Germany and France are democratic countries; Egypt and Iraq are socialist.

GERMANY

Purposive uniformity was adopted in Germany by the National Socialist (Nazi) Party in the 1930s. While it appeared under a socialist regime, it survived Nazism and still underlies accounting control in the Federal Republic of Germany.

The concept of uniform accounting for all businesses, including a uniform chart of accounts, was proposed by Professor Eugen Schmalenbach.[3] The premise was that the self-regulatory competitive market could not be regarded as the best mechanism for efficient allocation of the nation's scarce resources. This theory pleased the Nazis, who were intent on harnessing commerce and industry for national purposes, and led to the 1937 decree of the German Reichstag that made uniform accounting compulsory.

The elimination of the self-regulatory competitive market during the Nazi period is discussed by Lurie:

> While uninhibited operation of a "free" price and market mechanism is hardly the case in any of the contemporary industrial economies, in the Nazi economy the elimination of the automatic regulatory function of this mechanism was virtually complete.[4]

Mueller believes that uniformity played a key role in promoting the enormous and well-directed economic development of Germany in the late 1930s:

> During the mid-1930's Germany began a concentrated productivity drive coupled with rapid rearmament. Whole regrouping of industrial firms was undertaken, and uniform accounting was instituted to provide for the improvement of industrial efficiency and to yield reliable business statistics.[5]

---

[3] Eugen Schmalenbach, *Der Kontenrahmen* (Leipzig: Gloeckner, 1928); and *Dynamische Bilanz* (Leipzig: Gloeckner, 1919); English translation, *Dynamic Accounting* (London: Gee and Co., 1959).

[4] Samuel Lurie, *Private Investment in a Controlled Economy* (New York: Columbia University Press, 1947), p. 213.

[5] Gerhard G. Mueller, "International Experience with Uniform Accounting," *Uniformity in Financial Accounting,* in a special issue of *Law and Contemporary Problems* 30, no. 4 (Durham, N.C.: Duke University School of Law, Autumn 1965): 859.

Singer estimated that by January 1940, uniform accounting was used by all German industries.[6] Since World War II, however, a free enterprise economic system has been in effect. By 1949 uniform accounting systems were recommended, after some modifications, on a voluntary basis.[7] They are generally used in Germany now, making compulsion at this point unnecessary.

The success of purposive uniformity in Germany was due to the emphasis placed on national goals, which overrode provincial interests. Because the national planning board in Germany had both sole authoritative control over information and an identifiable set of operational information needs, and because users and regulators of accounting information are the same group of people, purposive uniformity was needed in Germany. Purposive uniformity was needed, and the central power was there to meet that need.

Another reason behind the success of purposive uniformity in Germany is that the Germans are considered to be fond of things orderly and systematic. The strong drive in the 1930s toward self-sufficiency led the Germans to accept this restriction on their freedom in exchange for a more productive society.

FRANCE

Purposive uniformity was developed in France in 1946 by a Commission for Accounting Standardization under the title "Plan Comptable General."[8] The French plan has been mandatory since 1947 for publicly owned enterprises, for enterprises in which 20 percent or more of the capital stock is government-owned, and for enterprises that received 10 million francs or more in governmental aid.[9]

The French purposive uniformity model was revised several times by the National Accounting Council in response to changing needs. This uniformity has been adopted by many French enterprises because it has proved flexible enough to allow for changes in economic conditions. The Committee on International Relations of the American

---

[6] Hans W. Singer, *Standardized Accountancy in Germany* (London: National Institute of Economic and Social Research, Occasional Paper No. 5, 1943), p. 17.

[7] Rein Abel, "The German Experience with Uniform Accounting and Its Relevance to the U.S. Controversies on Uniformity" (Ph.D. diss., Columbia University, 1967), p. 56.

Bernard M. Berry, "Uniform Accounting in France," *Accountant* (February 26, 1949): 157.

Mueller, *International Experience,* p. 865.

Institute of Certified Public Accountants (AICPA) cites F. M. Richard as stating that 90 percent of big enterprises, 60 percent of intermediate enterprises, and 40 percent of small enterprises have adopted the French plan as the model for their accounting.[10]

The success of purposive uniformity in France is due to direct governmental control over a large segment of the economy and to an identifiable set of user operational information needs. To the extent that users of accounting information are also regulators, purposive uniformity is present.

The readiness of the French people to accept governmental intervention in the country's economy is another reason for the success of purposive uniformity in France. The urgent need for above-average economic development is the main reason for this attitude by the French people.

EGYPT

Since the nationalization decrees of 1961 by which the Egyptian government acquired control of approximately 80 percent of the country's economic resources, the Egyptian government has formulated the elementary stages for national uniform accounting. It has been recognized since 1961 that only through a unified system of accounts could the Egyptian National Planning Board control the operations of the different units in the country. The Uniform Accountancy Law of 1966 (number 4723) established a uniform system of accounts for all units under the National Planning Board's control except for banks and insurance companies, which were under different regulations.[11]

The Egyptian purposive uniformity model is an accounting handbook published by the government. It traces the movements between accounts, sets norms for accounting classifications, and spells out valuation and reporting methods. It facilitates financial comparisons so that through such comparisons, inefficient enterprises can be easily identified.

Because the users and regulators of accounting information are the same group of people, and because there is both central governmental control over the economic activities of the Egyptian economy and an

[10] American Institute of Certified Public Accountants, Committee on International Relations, *Professional Accounting in Twenty-five Countries* (New York: American Institute of Certified Public Accountants, 1964), chap. 12, p. 22.

[11] Central Accountancy Agency, *The Uniform Accountancy Law* (Cairo, Egypt: 1969), in Arabic.

identifiable set of user operational information needs, purposive uniformity has been successfully applied in Egypt. This uniformity is needed to help the National Planning Board achieve its objectives effectively.

Another reason behind the success in applying purposive uniformity in Egypt is the readiness of the Egyptian people to accept government regulation of the country's economic affairs in the hopes of having a more productive society.[12] The majority of the Egyptian people are poor and uneducated and are willing to see the central government play a major role in the development of their country.

The urgent need for above-average economic development is the main reason why the Egyptian government interferes to a considerable degree in the country's economic affairs. The ultimate goal of this interference is to increase the national rate of economic growth. This can be done only when the government is well informed of the factors affecting the goal setting. This explains why there is a tendency toward more uniformity whenever the government of a nation feels the need for economic development.

IRAQ

The importance of accounting uniformity has been recognized since the establishment of the Iraqi National Planning Board in 1959. Without comparable accounting information, it would be difficult for the National Planning Board to allocate economic resources effectively at the central level.

During the course of an interview by the author with the Iraqi minister of planning, it became clear that the National Planning Board has recognized the need for purposive uniformity since its establishment.[13] No strong move has been made by the Iraqi National Planning Board toward the development of this uniformity, however, for two reasons.

First, the frequent changes in government with attendant changes in political appointments have led to frequent changes in the membership of the National Planning Board,[14] in turn causing a series of changes in economic plans. The instability of the political system in Iraq thus

[12] This statement is based both on personal interviews with some officials in the Egyptian Institute of National Planning in the summer of 1969, and on personal observations.

[13] The opinions of this section are partly based on information obtained in the course of personal interviews with the Iraqi Minister of Planning Jawad Hashim, and other Iraqi officials in the summer of 1969.

[14] For example, Iraq had nine ministers of planning between 1964 and 1972.

has been one reason why the National Planning Board has failed to develop and implement purposive uniformity in Iraq.

Second, the level of accounting education in Iraq is rather poor compared with that of a developed nation, and this has made the National Planning Board hesitant about developing purposive uniformity without the help of foreign accountants. Lack of competent staff to develop accounting uniformity and fear of failure have resulted in slow progress toward purposive uniformity.

With central governmental control over a large segment of the Iraqi economy and with an identifiable set of operational information needs, purposive uniformity should emerge; the question is in timing.

CONCLUSION

Under the concept of purposive uniformity, users and regulators of accounting information are the same group of people. This concept suggests that truth in accounting can be found only in the relevance of the control process to the needs of users.

Two reasons account for the general absence of purposive uniformity in America. First, in a free enterprise economic system, people are generally unwilling to accept an authoritative body which governs their affairs and restricts their freedom. Accountants under this system stress the gradual development of accounting standards and procedures rather than the establishment of a body, accounting or legislative, to create an authoritative, comprehensive code of accounting standards and procedures.

Because the United States does not have a national planning board with authoritative control over information and because the interests that the Accounting Principles Board of the American Institute of Certified Public Accountants serves are so diverse, it is impossible for the board to achieve purposive uniformity.

Second, the Securities and Exchange Commission (SEC) has chosen not to exercise its power to enforce purposive uniformity. The SEC could have advanced purposive uniformity in the United States had it chosen to do so, considering the amount of authority vested in it by the Securities Act of 1933, the Securities and Exchange Act of 1934, the Public Utility Holding Company Act of 1935, and the Investment Company Act of 1940.

Three reasons contribute to the success of purposive uniformity in the following environmental settings: (1) internal management, (2) the U.S. federal regulatory bodies, (3) the U.S. Internal Revenue Service, and (4) national planning boards.

First, uniformity has been applied to a higher degree in an environment where there is central control over the operations of a defined group of entities and an identifiable set of user operational information needs.

Second, uniformity has been easily applied in a country where the people are ready to accept government intervention in the country's affairs.

In the Middle East there is a third reason for the success of purposive uniformity; this is because the level of accounting education is rather poor in comparison with that of the developed nations. Accountants cannot be expected to exercise mature judgment in their work. Thus, a central government has to take the initiative to achieve an acceptable standard of accounting practices in the country. This can be done by applying purposive uniformity.

MAS and the Expanded Meaning of Accounting Education

THOMAS H. WILLIAMS AND CHARLES H. GRIFFIN*

The emergence during the past decade or so of management advisory services (MAS), and management consulting in general, as a significant professional commitment has had a profound impact on the nature and structure of accounting practice in the United States, the United Kingdom, and Australia. If such services are to have a permanent influence, it seems fairly clear that accounting education must develop responsive curricula and programs. The response, of course, is dependent upon the spectrum of services ultimately to be embraced. This spectrum is itself, we believe, a function of the best service that

* Professor Thomas H. Williams is professor of accounting at the University of Texas at Austin. He received his B.B.A. from the University of Cincinnati and his M.S. and Ph.D. degrees from the University of Illinois. He is a CPA in Ohio, Illinois, and Indiana. He served as the James M. Forrestal Professor of Management at the Naval War College in Newport, Rhode Island, in 1968-70. He was selected as the American Institute of Certified Public Accountants' Distinguished Professor of Accounting in 1972, and served in this capacity at the San Jose State University for the academic year 1972-73. He is coauthor of a forthcoming book (coauthored with Robert G. May and Gerhard G. Mueller), *A New Introduction to Accounting.*

Professor Charles H. Griffin is professor of accounting at the University of Texas at Austin. He received his B.B.A., M.B.A., and Ph.D. degrees from the University of Texas. He is a CPA in Texas and Illinois. He is coauthor (with Professor Williams and K. D. Larson) of *Advanced Accounting* (revised edition), and with Professor Williams has coauthored *Management Information, A Quantitative Accent,* and *The Mathematical Dimension of Accounting.* Professor Griffin was the editor of the *Accounting Review* from 1967-70.

This paper was originally presented in a slightly different form at the eighty-fourth annual convention of the American Institute of Certified Public Accountants in Detroit, Michigan, in October 1971.

can be accommodated in a viable form within the accounting profession. Accordingly, we propose to consider briefly from an educator's perspective the evolution of the management advisory function and accounting practice in general, and then address ourselves to the question of appropriate educational reactions.

ACCOUNTING PRACTICE: UNITY OR CONGLOMERATE IN FORM?

The boundaries of management advisory services provided by accounting firms are presently indistinct and difficult to define. Indeed, many informed practitioners believe that it would be unwise to circumscribe these services or attempt to set firm boundaries. They regard this function as a response to an existing need that can be met to the extent that such competence is available within a particular accounting firm. Such a position, however, creates various problems for the accounting educator, who must conceive of and structure requisite educational programs that will prepare future accountants for practice in this area. Nonetheless, we believe that it is possible, minimally, to identify certain basic characteristics and related methodologies that will give some educational direction for this professional service.

Two fundamental questions often raised relative to the practice of management advisory services involve *independence* and *competence*. Because these issues concern basic cornerstones of public accounting practice, we believe that they must be at least briefly considered in speculating on the ultimate character of accounting practice. The question of independence is patently important, but it is not uniquely related to the particular form in which management advisory services are practiced today. Rather, we sense that it is generally agreed that the function of advising management on its information systems — and indeed on selected operating policies — has always been perceived as an integral part of the overall audit engagement. The distinguishing characteristic of recent practice, it appears, has been the increased reliance on a body of knowledge that largely lies outside the area of accounting, traditionally defined, as well as the increasing number of engagements that are *wholly advisory* in nature. Given the existence of tax practice as a well-accepted part of accounting practice, we conclude that the independence question must be resolved, but in the context of a dual attest/advisory service, which has a long history in accounting practice. In the commentary that follows, therefore, no attempt is made to resolve this broad philosophical question.

We propose, however, to address the issue of competence herein.

The propensity of many practitioners is to argue that the management advisory function should not be circumscribed by narrowly defined descriptors of appropriate areas of service — such as accounting information systems or systems of internal control. It is nonetheless clear that the question of a public accounting firm's competence to render any particular service is a critical consideration. Currently, it appears to the authors that public accounting firms have recognized the need for advisory services in general; our impression is that they consider themselves in a unique position, because of educational backgrounds, experience, and relationships to their clients, to provide assistance in various areas.

Moreover, where a specific competence appears needed to fill in existing talent gaps, the most frequent reaction has been to employ those individuals with the necessary special credentials, regardless of whether they have broader qualifications in accounting. This has resulted, or so it appears, in the creation within many accounting firms of a conglomerate-like set of capabilities — particularly within the management services area. Perhaps no other alternative exists if the desired service is to be rendered. Furthermore, it can be argued that this combination has resulted in the highest level of service to society that can be achieved at present.

We question, however, whether this is viable in the long run. The strength of accounting practice derives, we believe, from its professional orientation — a posture that appears inconsistent with a mere collection within an organization of knowledgeable individuals without common backgrounds. Accordingly, if the management advisory services function is to remain a significant part of accounting practice, as accumulated evidence seems to suggest, and if accounting practice is to further enhance its professional standing, as seems desirable, then the concept of accounting, or the accounting profession, must be enlarged to accommodate new service opportunities, while maintaining a commonality of core knowledge.

This raises the ancillary question, of course, whether such a solution is possible regarding management advisory services practice. It clearly has already been largely accomplished with respect to the audit and tax phases of the profession. We posit that it is equally feasible for the management services function. We are aware that in the past many practitioners have felt that adequate services would be virtually impossible without the assistance of individuals with impressive educational credentials in mathematics, engineering, psychology, and the computer

sciences, together with a measure of experience in these areas. This sensitivity, however, is merely the traditional initial response to an expressed need for any new service. In the absence of trained, experienced supervisors and executives within the responding organizations, it is obviously important to recruit individuals for these positions.

Yet we would suggest that this is transitory, and that educational and experience requirements for these leaders were significantly different from those for graduates entering the profession at junior levels. The question remains then whether new professionals whose entry into the profession is through a university accounting program (be it American, British, or Australian) have the necessary intellectual capability to deal effectively with subject matter to which they necessarily must be exposed. While we cannot provide any definitive evidence (we do note the tangentially related statistics showing that those in the accounting profession have the highest average intelligence quotient [IQ] of any profession or vocation in our society today), we are confident that present university students are capable of assimilating those subjects necessary to prepare them for this aspect of professional accountancy, and that students in the future should be even more qualified.

This solution, incidentally, as we perceive its consequences, provides a basis for defining the boundaries of the management services function; that is, the field will include those areas that accountants can deal with (defined now in broader terms) based upon a body of knowledge considered to underlie their discipline, subject to augmentation on occasion by specialists from other disciplines. This appears to provide a sufficiently flexible base so that services and education can be modified together as societal needs and conditions change.

CONTENT OF ACCOUNTING EDUCATION

Nature of University Education

Before considering the specific educational implications of these trends, it may be useful to briefly consider the nature of education as viewed by many university educators in the United States. A fundamental point to keep in mind is the importance that academicians place on the distinction between *professional education* and *vocational training*. As with most fundamental propositions, however, the distinction is difficult to articulate. The typical educator, to the extent that one exists, is inclined to make this distinction in much the same way one U.S. Supreme Court Justice did in a classic commentary on a case involving alleged pornography. The Justice observed that many of his

predecessors had attempted to define pornography and suggested that he would not endeavor to improve on their efforts; rather, he concluded merely that he knew it when he saw it and this (the present evidence) wasn't it.

Perhaps "it" (the distinction) can be exposed, in part, in terms of goals. Vocational training is viewed by many accounting educators as a method of instructing individuals in the mechanics or procedures of some particular process with a view to developing their facility in dealing with the data subjects of the process, with relatively minimal concern for cultivating an understanding of the operation sequence. On the other hand, professional education purports to concern itself with developing the individual as well as his professional skills, instilling values as well as techniques, and providing intellectual enrichment as well as marketable knowledge.

If, in fact, these are the desired goals of education, we should perhaps exclude any professionally oriented education from our universities, and provide instead a general liberal arts background for all students. Indeed many successful executives have joined our academic colleagues in the liberal arts in arguing that just such a background is the most appropriate education for our profession. The value of such an education, broad in its dimension, cannot be denied; yet, the fallacy of an overadvocacy of this argument stems, we believe, from two inherent contradictions.

First, a logical extension of this line of reasoning ultimately leads one to support the proposition that all students should be educated only in the classics, as all other extensions of this educational emphasis are, in part, specializations and responses to external needs. Further, one may ask why the classics are chosen as the general, nonpractical, liberalizing form for knowledge. This we believe would lead one to a logical state of indeterminancy about the appropriate nondisciplinary-oriented vehicle through which education is to be provided. Second, advocates of a liberal arts education presume implicitly that all other types of education are unable to yield the desired educational goals, and, further, that a liberal arts education is able to achieve these goals. Both of these assumptions are, in our judgment, fallacious.

Liberal arts are, to a large extent, a repository for a variety of highly specialized bodies of knowledge, and one may easily emerge from one of these programs not with a broadly conceived education but rather with a narrow perspective on education and the world. On the other hand, by being emersed in subjects associated with a particular profes-

sion, we believe that the student can be alerted to many broad, intellectually satisfying questions, while he develops his ability to handle practical problems.

Core Educational Requirements for Accounting

Developing a core body of knowledge for the accounting profession ten to twenty years hence is an ambitious, but necessary, endeavor. Since our attention is focused on the management advisory services function, we propose to look at some of its basic characteristics to gain some insight into the direction in which we should be moving educationally. The emergence of this function in accounting is not unique, but is, rather, a part of the ubiquitous spread of management science throughout the sphere of business and governmental planning and control.

An essential characteristic of this function is the emphasis that it gives to quantitative analyses of management problems to generate improved (hopefully optimal) decisions. A second important characteristic is the rapid spread of computer information systems throughout the economy. These characteristics provide the potential for analyzing problems in a much more sophisticated manner, hopefully with results beneficial to society. These two developments seem to have been recognized by Roy and MacNeill[1] in their research on the educational requirements for accountants in the United States, as their recommendations relating to these areas represent the main additions to the core of knowledge now generally accepted. Since these developments are not confined, in any sense, to the management advisory services function — they also impact, directly or indirectly, upon the taxation and auditing services — we believe it reasonable to conclude that the educational core proposed by Roy and MacNeill is a relatively good specification of the fundamental body of knowledge for all accountants.

Advanced Study and Research in Accounting

Given a consensus on a desirable core of knowledge for accountants, we are persuaded that the accounting student can thereafter specialize to the extent that he desires in one of the three general service areas: auditing, taxation, or management services. The authors, on a previous occasion, have considered the question of the particular blend of courses necessary for a student to achieve competence in the management sciences area, and have concluded that in a five-year accounting

[1] Robert H. Roy and James H. MacNeill, *Horizons for a Profession* (New York: American Institute of Certified Public Accountants, 1967).

program culminating in a master's degree, adequate educational background could be obtained to meet the requirements for entry into this field.[2] Such a specialization currently exists within the Master of Professional Accounting (M.P.A.) at the University of Texas at Austin, as well as an accommodation to concentration on taxes. Without recounting the particular courses and sequences in this program, we assert that there exists therein a strong emphasis on quantitative methods, computer systems, and the behavioral sciences, in the context of fundamental problems and issues currently confronting the accounting profession.

At the time this specialty program in management science was developed within the M.P.A. program at the University of Texas, the overriding question was whether there existed an area of advanced specialization in management services within the accounting discipline. We assumed at that time, and now reaffirm, that it does exist, or can exist, and is but a logical extension of the accounting function in the existing social and economic environment. The arguments advanced here hopefully are persuasive that such a conclusion is valid. With regard to the specific character of the program, however, several perplexing problems still remain to be analyzed and resolved. For example:

1. How many additional advanced courses above present core requirements in the quantitative methods and information processing areas are required?
2. What is an appropriate blend of courses for these two complementary areas for management advisory services specialists? Are there two or more possible combinations of courses within the broader discipline of management advisory services?
3. What blend of conceptual and problem-solving (or technique-oriented) courses is appropriate?
4. What amount of specialization can be accomplished at the undergraduate level, and what amount can or must be deferred to the graduate level?
5. And finally, apropos of graduate education, will a master's degree be sufficient for the management advisory services practitioner, or will increasing emphasis be placed on the doctoral degree for leaders in this area?

Resolution of these problems partly depends on a better understand-

[2] Thomas H. Williams and Charles H. Griffin, "Management Science and Accounting Education," *Texas Certified Public Accountant* (April 1967): 23-27.

ing of the roles of the management advisory services practitioner and the educational requirements that inspire confidence in his performance of these roles. A comprehensive study of these questions, under the auspices of the American Institute of Certified Public Accountants or other professional societies, would represent in our opinion a highly useful follow-up to the Roy and MacNeill survey of the common body of knowledge for all accountants. Indeed, it would be useful if such organizations commissioned studies in the three areas of specialization (auditing, taxation, and management advisory services) regarding their educational implications.

ORGANIZATIONAL STATUS OF ACCOUNTING EDUCATION

Most widely recognized professions have a formal body of knowledge that potential entrants are presumed to have acquired, often within an autonomus professional school or college at the university level. Such an organizational arrangement occasionally has been proposed for accounting. For numerous reasons these proposals have not aroused the degree of support that their advocates might have desired. It occurs to us, however, that the growing significance of the management advisory services function, together with the broadened concept of accounting that it entails, may provide the catalyst for such a change in the educational process for accounting. It occurs at a time when many of our most prestigious institutions of higher learning are moving from programs with professional orientation to more general management programs. This has already had a noticeably adverse effect on the number of students who upon graduation manifest an interest in the accounting profession, as many public accounting firms will attest. It virtually denies a logical development of an adequate educational program for a more broadly conceived accounting profession, even if ways were found to maintain or stimulate an acceptable level of student interest. Perhaps the advocates of an independent professional school of accounting may — at last — be heard by a more sensitive professional audience.

The potential benefits of a professional school are numerous and widely recognized, including, among others, an increased public recognition of accounting's professional status and early development of a professional attitude and identification in the accounting student. There are, we believe, two principal objections to a professional school, at least on the part of educators, that must be considered. First, many accounting educators still believe that a professional school would so

narrow the scope of accounting that its academic standing and intellectual base would be essentially undermined. Second, still other accounting educators suggest that the profession of accounting should extend beyond the pale of the public accounting sector and that a professional school would probably cause the educational process to converge with this interest group, to the detriment of other segments of the economy similarly interested in employing accounting graduates.

The second objection, we believe, can be dealt with more easily than the first. In particular, if accounting educators and the accounting profession can arrive at a consensus as to our discipline's domain, we are optimistic that there would be no great tendency on the part of students or faculty to neglect the interests of, or opportunities in, business and government. Indeed, with a broader professional orientation, we hypothesize that the professional school student might well be more sensitive to the full scope of the accounting function than under other organizational arrangements.

The other objection to establishing an independent organizational unit for education in accounting requires somewhat more attention. It assumes, or so we believe, that a proclivity toward overspecialization and an academically insulated perspective would follow an organizational separation from colleges of business administration (or faculties of commerce and social science). We posit as a refutation of this position that such a school, rather, would liberate the accounting faculty from an increasingly insulated position within the existing organizational framework and would provide a richer, more liberal accounting curriculum.

One of the strengths of a major university is its accommodation of diverse interests. To avail oneself of these varying perspectives and interests, however, there must be an effective interface, or line of communication, between the various organizational units. Person-to-person or professor-to-professor relationships seldom provide a sufficiently viable base for continuing interaction on a departmental level. We would suggest that the existence of an accounting organizational entity within a college (or faculty) of business administration has hampered, and promises to constrain even more, establishment of the necessary relationship. Illustrative of this tendency is a continuing introspective attitude that one observes within the curricula of many colleges of business administration (or faculties of commerce and social science). For example, a basic computer course is incorporated within the curricula of many colleges of business administration in the United States —

notwithstanding the accessibility of a cooperative computer science department on most campuses. One also sees an increasing retreat inward in such courses as economics (generally at the graduate level) and mathematics.

The result of such action is a diminution of contact by students and faculty with faculties and students in other basic academic disciplines. While one may argue that an accounting department, per se, need not persist in this detachment (i.e., away from other university departments) in all its course requirements, it is a part of academic realism that many courses are core requirements for all business students. This condition militates against independent departmental action. When potential accounting students are introduced in early years to economics and mathematics, often they must satisfy the same course requirements in these subject areas as other business students. A movement to the status of a separate organizational unit, on the other hand, might well increase the opportunity to establish desirable ties with other departments within the university. The consequence should be a significant broadening of perspectives and the substantial upgrading of both the research capability of faculty and the content of existing programs in the curriculum.

These conclusions depend, of course, on an available supply of faculty members with sufficiently varied interests in a number of basic academic disciplines. In the absence of such individuals, it would indeed be easy for an independent professional school to become increasingly specialized and oblivious to academic developments in other related areas. In surveying the background of new faculty members in departments of accounting throughout the United States within the past year or two, however, one inevitably must conclude that the individuals are well disciplined in a variety of basic (nonaccounting, nonbusiness) subject areas, and that they would likely be predisposed to direct their students to these departments for their basic courses. For example, if one believes (as Roy and MacNeill advocate) that an accounting graduate should have six to nine hours (two to three courses) in the behavioral sciences, it should be possible — we would argue, desirable — for the curriculum of a professional school to incorporate courses offered in the basic areas of the behavioral sciences, which are preferable to courses within colleges of business administration (or faculties of commerce and social science). Such courses are, in part, of the desired character but are often taught by individuals who have but a secondary interest and academic background in the behavioral sciences.

SUMMARY

In conclusion, we see no cogent reason why university accounting programs should be contained within a college of business administration (or faculty of commerce and social science) in preference to other organizational arrangements. Although many accounting students elect to enter the world of business, either directly or indirectly, this does not mean that they should necessarily be exposed to an extensive business curriculum sequence. If they are, it is, in our opinion, too often a constraining, myopic experience. In developing faculty interests this argument appears equally valid. Thus, we conclude that there is no compelling reason why a movement toward a separate, independent status should result in excessive specialization or withdrawal from the purportedly more liberal and general attitudes and interests held by other faculty members within colleges of business administration. Indeed, we would argue that the probability is reasonably high that precisely the opposite effect would occur: that it would have a liberating, enriching effect on existing perspectives and curricula.

These conclusions were initially reached in a context of accounting as it is presently practiced. With the broader perspective that many now wish to attribute to accounting — that is to say, viewing accounting as a service activity designed to aid social units as well as business units — we believe that the validity of these conclusions is even more apparent.

To accomplish the redirection of accounting education, both organizationally and programatically, accounting educators need the advice and support of professional accounting organizations, including the American Institute of Certified Public Accountants, the Institute of Cost and Management Accountants, the Institute of Chartered Accountants, and the Australian Society of Accountants. The studies and observations of these groups are especially valuable to accounting educators. Given this input, perhaps both branches of the profession — education and practice — may experience greater fulfillment.

The Valuation of Tax-Depreciable Assets

F. K. WRIGHT*

A theory of asset valuation, based upon the concept of opportunity value of asset services, has been developed in previous articles as a theoretical standard for assessing depreciation practice.[1] The theory, however, did not take into account that most assets are owned by tax-paying corporations entitled to income tax deductions in respect to those assets. In this article, that theory will be modified to include the effects of taxation, and will then be applied to the problem of valuing tax-depreciable assets.

This problem is, of course, not new to the literature. Important contributions have been made by Bierman and Green,[2] Terborgh,[3] Drake,[4]

* Ken Wright is professor of commerce at the University of Adelaide in South Australia. A graduate of the University of Melbourne in engineering and commerce, Professor Wright spent some years in industry and in management consultancy before joining the academic staff of the University of Adelaide. During 1967-68, he spent some time at Arthur D. Little, Inc., at the Massachusetts Institute of Technology in Cambridge, and at the Institute for Higher Studies in his native city of Vienna, Austria.

[1] See F. K. Wright, "Towards a General Theory of Depreciation," *Journal of Accounting Research* (Spring 1964): 80-90; and "Measuring Asset Services: A Linear Programming Approach," *Journal of Accounting Research* (Autumn 1968): 222-36.

[2] Harold Bierman, Jr., and David Green, "Accounting for Income — The Problems Arising from Certificates of Necessity," *Federal Accountant* (June 1957): 29-44.

[3] George Terborgh, *Business Investment Policy — A MAPI Study and Manual* (Washington, D.C.: Machinery and Allied Products Institute, 1958).

[4] David F. Drake, "The Service Potential Concept and Interperiod Tax Allocation," *Accounting Review* (October 1962): 677-84.

Dyckman,[5] and Greenball.[6] As a first step, these contributions will be summarized and reviewed.

BIERMAN AND GREEN

In 1957 Bierman and Green first discussed the effect of income tax upon the value of assets.[7] They clearly explained that the tax-reducing consequences of owning an asset represent, at current high corporate tax rates, a significant part of the total benefits yielded by that asset to the company. A tax-depreciable asset derives its value to the owner from "two separate and distinguishable characteristics — its utility as a service-producing mechanism and its utility as a tax deduction, or tax-reducing mechanism."[8] Accordingly, its purchase price may be divided into these two components, which may then need to be amortized over different durations.

In applying this principle to simple numerical examples, however, the authors at that time seem to have been unable to see beyond straight-line depreciation. They made no attempt to allow for the time-value of money by discounting future receipts; indeed, they seem to suggest that the purchaser of an asset would be willing to pay $5,000 for future tax savings totaling $5,000 over several years. Bierman remedied this blind spot in a subsequent article, discussed below.

TERBORGH

George Terborgh made a major contribution to the theory and practice of asset valuation with the publication in 1958 of *Business Investment Policy*.[9] In that book he put forward as an investment decision criterion the one-more-year test, which compares acquiring new equipment now with the alternative of doing without it for one more year. To make that test operational, Terborgh needed a practical method "for deriving the remaining use value of a depreciable asset to the owner at the end of its first year of service."[10] For this purpose, he

---

[5] Thomas R. Dyckman, "Discussion of 'Accelerated Depreciation and Deferred Taxes — An Empirical Study of Fluctuating Asset Expenditures'," *Empirical Research in Accounting: Selected Studies,* Supplement to *Journal of Accounting Research* (1967): 125-38.

[6] Melvin N. Greenball, "Appraising Alternative Methods of Accounting for Accelerated Tax Depreciation: A Relative-Accuracy Approach," *Journal of Accounting Research* (Autumn 1969): 262-89.

[7] Bierman and Green, "Accounting for Income."

[8] Ibid., p. 39.

[9] Terborgh, *Business Investment Policy.*

[10] Ibid., p. 58.

devised the new Machinery and Applied Products Institute (MAPI) formula.

Since his book was intended primarily as a user's manual, the theoretical foundations of the new MAPI formula are not set out as clearly and concisely as one might wish, but have to be pieced together from chapters 6 and 7, and from the appendices (especially C and D). When this is done, the following argument emerges.

It can be shown that the economic life of an asset has ended when the value of the next year's net services is equal to or less than a year's interest on the current salvage value plus the expected drop in salvage value over the next year.[11] It follows that the value of the annual services of an asset with zero salvage value must fall to zero by the end of its economic life; if the asset has a positive salvage value, the annual value of its services at the end of its economic life may be estimated from the amount and rate of decline of this salvage value. On the basis of salvage-value forecasts, therefore, Terborgh estimates the level to which the annual service value of an asset will fall.

He then assumes that the services that an asset is expected to yield over its economic life, together with its salvage value (if any), discounted at the company's cost of capital, have a present value at the time of acquisition equal to the cost of the asset.[12] The grounds for this assumption are not stated; it seems to have been based purely on Terborgh's intuition. Fortunately, this intuition was sound.[13]

With the aggregate value of annual services, the level to which they will decline, and the number of years over which the decline will take place thus *fixed,* one degree of freedom is still left: the time shape of the service values remains to be determined. Here Terborgh offers the user a choice of three patterns: linear decline (which he calls the standard projection), a slightly concave decline (variant A), or a slightly convex decline (variant B).

Where obsolescence is a major factor eroding the competitive earning power of an asset, Terborgh strongly favors the standard projection. Where deterioration manifests itself mainly in loss of precision, spoiled work, liability to outages, and the like, the incidence of these could increase rapidly toward the end of the asset life, in which case variant A might be more appropriate. Where an asset is progressively

[11] From here on, the adjective *net* before *services* will be omitted. It will be understood that services are always valued net, i.e., after deduction of the operating expenses necessary to extract them from the asset.

[12] Terborgh, *Business Investment Policy,* p. 67.

[13] This point will be further discussed on p. 50.

downgraded to less-demanding and less-continuous service, variant B could be favored. When no good reasons exist for favoring either variant, Terborgh recommends using the standard projection, especially since obsolescence "is probably the major element in the declining service value of most types of capital goods."[14]

Suppose that the standard projection is chosen; Terborgh would then set up a series of linearly declining pre-tax service values consistent with the estimated economic life and salvage value, so that the after-tax service values (and salvage value, if any), discounted at the company's after-tax cost of capital, equalled the acquisition cost of the asset. These service values and the discount rate might then be used to predict the asset's residual value for any subsequent time.

DRAKE

David F. Drake made an important contribution to the valuation of tax-depreciable assets in *Accounting Review,* October 1962.[15] Drake spelled out three assumptions on which his asset valuations were based: perfect competition throughout the economy, certain knowledge of future events, and concentration of all monetary transactions into the last day of each period.[16] He needed these assumptions to ensure that "in a world so defined, the historical cost of an asset is equal to the discounted value of its stream of services," and that the income from the asset in each period represents a constant rate of return, equal to the discount rate on the net value of the asset at the beginning of the period.[17]

Drake then set up a numerical example of an asset with cash flows of revenue and expense that, after allowing for corporate income tax, make the initial value of the asset equal to its cost; he found, as predicted, that each period's after-tax income represented a constant fraction of the asset value at the beginning of the period. Using this example, he sought to demonstrate that income tax expense "is one of the direct determinants of an asset's stream of service potential because it has a direct impact on the service stream."[18]

He clinched the demonstration by showing that liberalization of the Internal Revenue Code to permit substitution of the sum-of-digits

---

[14] Terborgh, *Business Investment Policy,* p. 70.

[15] Drake, "The Service Potential Concept."

[16] He seems to have made a fourth assumption also: that a given asset yields the same stream of services to any firm that might acquire it.

[17] Drake, "The Service Potential Concept," pp. 678-79.

[18] Ibid., p. 680.

method for straight-line depreciation would cause a rise in the asset's market price even though all other data remained unchanged.[19] At the same time, he observed, the proper pattern of depreciation for financial purposes was shifted in the direction of the sum-of-digits method.

If the straight-line method were nevertheless to be used for financial purposes, no method of interperiod tax allocation would give a constant rate of return on net asset value. From this, Drake deduced that no method of tax allocation was consistent with the service potential concept; that is, with valuation of an asset at the discounted value of its future services and salvage value.

He also offered a theoretical explanation of this inconsistency. Interperiod tax allocation violates homogeneity of measurement of the monetary unit in the time dimension. By this he meant that the transfer of a dollar from one point in time to another requires discounting or compounding at the appropriate interest rate. Since interperiod tax allocation practice neglects this, it cannot give a correct result.[20]

In his conclusion, Drake laments the immense problems of translating his theoretical insights into accounting practice. He arrived at valuations of the service potential of his hypothetical asset only by postulating the initial equality of cost and value, based on assumptions of certainty and perfect competition. In the real world, he feels, it will prove very difficult to derive methods of depreciation reflecting the shape of the service potential stream. Great research efforts must be made.[21]

BIERMAN

In the very next issue of *Accounting Review,* Bierman suggested a method for correctly reflecting a considerable part of the service potential stream.[22]

In Drake's examples, tax had been calculated from the taxable income attributable to the asset, which required a knowledge of the net revenue from the asset in each period. Bierman drew attention to the significant part of the total services of the asset that can be forecast without detailed knowledge of revenue flows. The value of tax deduc-

[19] Ibid., pp. 681-82.

[20] Except, of course, in the case of zero interest, which Drake quite justifiably ignored.

[21] Drake, "The Service Potential Concept," p. 684.

[22] Harold Bierman, Jr., "A Problem in Expense Recognition," *Accounting Review* (January 1963): 61-63.

tions derived from the asset depends only on the firm's tax depreciation policy, the future course of tax rates, and the firm's continued profitability. Forecasting the dollar value of these deductions is thus relatively easy and, given stability of tax rates, the forecasts are likely to be quite accurate.

Bierman therefore revived the earlier suggestion that the cost of an asset might be split into two parts, one of which would represent its tax-reduction potential.[23] This time, however, he correctly defined the asset's tax-reduction potential as the present value of all the tax deductions derived from it. This tax-reduction potential would then be amortized on an objective basis as the deductions are claimed, while the other part of the asset account, representing the productive service potential, "could be depreciated using some appropriate method."[24]

Bierman does not necessarily require the asset's cost and value to be equal at the outset. For him, its initial value may well exceed its cost. He does, however, specify equality of cost and value for that part of the asset representing the tax reduction potential, leaving any excess of value over cost to fall into the other part of the asset for which he does not attempt to specify the appropriate method of depreciation.

DYCKMAN

In 1967, Dyckman, in a commentary on a paper by Livingstone presented to the Chicago Conference on Empirical Research in Accounting, drew attention to Drake's paper and gave his own views at some length.[25]

Unlike Drake, Dyckman does not assume perfect competition or certain knowledge of the future. Instead, he argues that an asset's depreciation pattern should be based upon the differential cash flows expected at the time of the investment decision, discounted at this particular investment's internal rate of return.[26] By adopting the internal rate of return as the rate of discount, he secures the initial equality of cost and discounted value that is needed to obtain a unique asset value at the end of each subsequent period.

With that exception, Dyckman's argument is similar to Drake's and Bierman's. Like Drake, he uses the constancy of the ratio of period

[23] Bierman and Green, "Accounting for Income."
[24] Bierman, "A Problem," p. 63.
[25] Dyckman, "Discussion."
[26] Ibid., pp. 126-28.

income to net asset value to test the validity of a proposed depreciation method, though in Dyckman's analysis this ratio equals the internal rate of return rather than the rate of discount used in finding a project's present value. Like Bierman, he divides an asset's effects upon a firm's cash flows into two categories, which he calls tax benefits and productive benefits; unlike Bierman, he would apportion any surplus of present value over cost to both categories.

Like Drake, he concludes that if the proper depreciation method (taking into account both kinds of benefit) has been applied in the books of account, no deferred tax problem can arise.

GREENBALL

In a research report published in 1969, Greenball examined the effect upon accounting income of using sum-of-digits depreciation for tax purposes in conjunction with several possible methods of book depreciation.[27]

Like Dyckman, Greenball believes that an asset ideally should be valued by discounting differential cash flows at the internal rate of return of the asset itself. He assumes, however, that real-world firms cannot or will not adopt this method, so that in practice the choice is confined to three possible methods of book depreciation: sum-of-digits, straight-line without tax deferral, or straight-line with tax deferral. Earnings and earning rates under each of those three methods are compared with what they would be under the ideal (internal rate of return) method of book depreciation.

Greenball investigates a variety of asset lives, internal rates of return, tax rates, rates of growth, and time shapes of productive services. He reports and comments upon the errors resulting from each method under each set of circumstances. Unfortunately, many of the asset categories studied by Greenball must be regarded as "empty boxes."[28] For instance, internal rates of return on the order of 20 to 50 percent per annum after tax cannot reflect the value of asset services alone. To obtain such a high rate of return, the cash flows discounted must include more than just the services of the asset itself. They would almost certainly include benefits from combining the services of the asset with other resources of the firm.[29]

---

[27] Greenball, "Appraising Alternative Methods."

[28] John H. Clapham, "Of Empty Economic Boxes," *Economic Journal* (September 1922): 305-14.

[29] The problems that such overlap with other assets creates have been discussed by Authur L. Thomas in *The Allocation Problem in Financial Accounting Theory* (Evanston, Ill.: American Accounting Association, 1969).

Then again, the time shapes of productive services considered by Greenball fall into three groups: convex increasing, constant, and convex declining; each is combined with zero salvage value only. Now, constant annual services followed by zero salvage value are characteristic of the "wonderful one-hoss shay" which is seldom encountered outside the pages of Oliver Wendell Holmes or the writings of academic accountants and economists. Increasing annual services followed by zero salvage value are even more unlikely to represent any physical asset.

Linear decline of productive services, the time shape most favored by Terborgh, is not among those considered by Greenball. Of the time shapes he does consider, convex decline at the rate of 30 percent per annum would seem to come nearest to a linear decline down to zero salvage value.[30] For this time shape of productive services, and for discount rates within the range of realistic cost-of-capital figures, Greenball's tables show that sum-of-digits book depreciation gives the most accurate results.

OPPORTUNITY VALUE THEORY

We now consider what contribution opportunity value theory can make to the problem of valuing tax-depreciable assets.

In previous articles by this author, it has been shown that when a firm acquires an asset the present value to the firm of that asset's expected services and salvage value is equal to its cost.[31] The argument in support of this theorem was framed without reference to taxes, but only minor adaptation is required to make it hold for a tax-paying firm.

For that purpose, *asset services* must be defined to include the value of any tax deductions that the firm is able to claim as a result of owning the asset. Conversely, of course, any tax payments caused by owning the asset must be subtracted, like other operating expenses, to arrive at the (net) value of services.

Consistent with this, the discount rate applied must be the after-tax opportunity cost of funds. If it represents potential earnings from surplus funds placed in the market, it should equal the net-of-tax earning rate; if it represents the weighted average cost of raising addi-

[30] Ten percent annual decline, which would be more nearly linear, still retains one-third of the first year's service value after ten years, so that a sharp drop to zero occurs at the end of its economic life.

[31] Wright, "Towards a General Theory," pp. 84-85; and "Measuring Asset Services," pp. 231-32.

tional funds, the interest on any debt included in the average should be assessed net of tax rebate.

When focusing attention on the tax effects of ownership, it is useful (following Bierman) to distinguish between the tax-reducing services of an asset and its productive services. The theorem may then be restated as follows: At the time a tax-paying firm acquires an asset, the present value (discounted at the after-tax opportunity cost of funds) to the firm of the tax deductions expected to result from owning the asset, and of its expected net after-tax productive services and salvage value, is equal to its cost.

From the review of the literature, it can be seen how this theorem contributes to the solution of the problem. It justifies Terborgh's intuitive assumption of an asset's initial equality of cost and value, and it frees Drake's conclusions from their dependence upon the assumption of perfect competition. Together with Terborgh's analysis, it permits the construction on a sound theoretical basis of numerical examples indicating what type of depreciation pattern most nearly reflects the shape of the service potential stream for any particular type of asset. The construction of a few such numerical examples will now be undertaken.

Example 1

Data:

Original cost of asset	\$3,000
Economic life	five years
Time shape of productive services	linear decline
Salvage value at end of economic life	\$0
Tax depreciation method	sum-of-digits
Company tax rate	50 percent
Discount rate	.06 continuously compounded

We first determine what part of the initial cost represents the discounted value of future tax deductions. This is represented by

$$\begin{aligned} & 500e^{-.06} + 400e^{-.12} + 300e^{-.18} + 200e^{-.24} + 100e^{-.30} \\ &= 471 + 355 + 251 + 157 + 74 \\ &= 1{,}308. \end{aligned}$$

Hence the discounted opportunity value of all net after-tax productive services must be: \$3,000 − \$1,308 = \$1,692.

Since a linear decline to zero over five years is expected, the in-

Exhibit 1

t	*Tax deductions* PV	*Tax deductions* Depreciation	*Productive services* PV	*Productive services* Depreciation	*Total asset* PV	*Total asset* Depreciation
0	1,308		1,692		3,000	
0–1		419		588		1,007
1	889		1,104		1,993	
1–2		346		471		817
2	543		633		1,176	
2–3		266		346		612
3	277		287		564	
3–4		183		214		397
4	94		73		167	
4–5		94		73		167

stantaneous output rate of net after-tax productive services may be written as $\$R(1 - t/5)$ per year, where R is found by solving the equation

$$\int_0^5 R(1 - t/5)e^{-.06t}dt = 1{,}692.$$

This equation yields the solution $R = 746$; that is, the instantaneous output rate of net after-tax productive services declines from \$746 per year to zero over five years.

The value of the asset at $t = 1$ may now be calculated as follows:

$$\begin{aligned} V(1) &= 400e^{-.06} + 300e^{-.12} + 200e^{-.18} + 100e^{-.24} + \int_1^5 R(1 - t/5)e^{-.06(t-1)}dt \\ &= 377 + 266 + 167 + 79 + 1{,}104 \\ &= 1{,}993. \end{aligned}$$

The results of these and similar calculations are shown in exhibit 1.

The last column of exhibit 1 shows the ideal depreciation schedule for this asset. When compared with the depreciation charges that sum-of-digits would give (1,000, 800, 600, 400, 200), it is evident that the use of sum-of-digits for financial accounting would result in a depreciation pattern very close to the ideal for this asset. This is hardly surprising since sum-of-digits was used to calculate the tax depreciation, and the assumed linear decline of net productive services is quite similar to the sum-of-digits formula.

Example 2

We now abandon the assumption of a linear decline in the rate of generation of productive services and substitute a concave time shape.

Exhibit 2

t	*Tax deductions* PV	*Tax deductions* Depreciation	*Productive services* PV	*Productive services* Depreciation	*Total asset* PV	*Total asset* Depreciation
0	1,308		1,692		3,000	
0–1		419		472		891
1	889		1,220		2,109	
1–2		346		454		800
2	543		766		1,309	
2–3		266		389		655
3	277		377		654	
3–4		183		273		456
4	94		104		198	
4–5		94		104		198

This is conveniently done by letting the instantaneous output rate be $\$R(1 - t^2/25)$ per year, where R is now found by solving the equation

$$\int_0^5 R(1 - t^2/25)e^{-.06t}dt = 1{,}692.$$

This equation yields the solution $R = 566$. The instantaneous output rate of net after-tax productive services thus starts at a lower level than in the first example, but now declines much more slowly at first, dropping rapidly to zero in the fifth year. The figures for this example are given in exhibit 2.

When sum-of-digits financial depreciation charges are compared with the last column of exhibit 2, the approximation is not quite as good as it was for exhibit 1. Sum-of-digits, however, is still an approximation superior to straight-line depreciation ($600 per annum in each period). Yet the degree of concavity assumed for the time shape of productive services was greater than that of Terborgh's variant A.

Example 3

These results raise the question, what time shape of net productive services would justify the use of straight-line depreciation for financial accounting? From the data (other than productive services) of examples 1 and 2, it can be calculated that the following pattern of net after-tax productive services, together with sum-of-digits tax depreciation, would yield a uniform total depreciation charge of $600 per annum (see exhibit 3).

Exhibit 3

Year	*1*	*2*	*3*	*4*	*5*
Value of net after-tax productive services	282	346	409	472	536

But as we have already seen, such steadily rising productive service values are difficult to reconcile with the assumption that the machine will be worthless at the end of the fifth year. In fact, these results suggest that while corporation tax remains in the vicinity of 50 percent, only a very exceptional piece of equipment would justify straight-line depreciation down to zero salvage value when sum-of-digits is used for tax purposes.[32]

Example 4

An Australian company engaged in contract research buys a scientific instrument for $6,000. This piece of equipment is expected to remain in use for ten years; at that time it will be obsolete with negligible scrap value. The Australian tax code permits the company to write off in three equal annual installments the cost of equipment used exclusively for scientific research, and the company opts for this tax-depreciation plan.

Assuming a linear decline to zero in the yield of net productive services, a 50 percent tax rate, and a discount rate of .06 continuously compounded, the results of exhibit 4 are obtained.

In this case, no simple depreciation formula will even remotely approximate the ideal depreciation schedule in the last column of exhibit 4. If a moderately realistic depreciation pattern is to be found, the value of the tax-reducing services must be segregated as suggested by Bierman. The problem of depreciating the net after-tax productive service potential could then be solved adequately by applying sum-of-digits depreciation to the initial amount of $3,336. If this were done and the tax-reduction potential depreciated objectively, the asset value would not deviate from the ideal by more than $30 in any year after the third.

[32] Dyckman, by a slightly different approach, also concluded that only a steadily rising annual value of net productive services would justify straight-line depreciation in the books when sum-of-digits is used for tax. He did not stress, however, the difficulty of reconciling such a rising pattern of service values with sudden termination of the economic life of the asset and a low salvage value. See Dyckman, "Discussion," pp. 129-31.

Exhibit 4

t	*Tax deductions*		*Productive services*		*Total asset*	
	PV	*Depreciation*	PV	*Depr ciation*	PV	*Depreciation*
0	2,664		3,336		6,000	
0–1		835		584		1,419
1	1,829		2,752		4,581	
1–2		887		537		1,424
2	942		2,215		3,157	
2–3		942		488		1,430
3	....		1,727		1,727	
3–4		...		434		434
4			1,293		1,293	
4–5				378		378
5			915		915	
5–6				318		318
6			597		597	
6–7				255		255
7			342		342	
7–8				187		187
8			155		155	
8–9				116		116
9			39		39	
9–10				39		39

CONCLUSION

Where sum-of-digits depreciation is used for tax purposes and the expected salvage value is very low, sum-of-digits is the most appropriate of the recognized depreciation methods for financial purposes. This is indicated by examples 1 and 2 and is consistent with Greenball's results. For other tax-depreciation methods and other salvage values, similar numerical examples can be constructed to identify the most suitable book depreciation method. In some cases, such as example 4, it may be necessary to follow Bierman's suggestion and apply different methods to the tax-reduction potential and the after-tax productive service potential.

Roman Accounting: The Influence of Socioeconomic Factors on the Development of Accounting Concepts

M. W. E. GLAUTIER*

An examination of the development of accounting in Roman times may follow several approaches. As the predominant purpose of accounting is to meet socioeconomic needs, one could attempt to identify these needs and then to see how far the Romans developed accounting techniques directed toward particular ends. One could also evaluate the general development of accounting procedures in this period. This approach involves considering the nature of the records themselves as indicative of the progress which had been made toward systematic double-entry bookkeeping which emerged much later in fourteenth-century Italy. One is interested, too, in discovering the extent to which social groups were aware of contemporary accounting concepts.

This paper proposes to develop thoughts involving these several paths without attempting too rigorous an analysis, while taking sufficient care to provide a realistic assessment of the development of accounting in this age.[1]

---

* M. W. E. Glautier is lecturer in accounting and financial management at the University of Sheffield.

[1] In developing this paper, I have relied extensively on the published works of scholars of Roman history and law for many statements, only some of which are acknowledged by bibliographical references. In particular, my debt to G. E. M. de Ste. Croix, Tenney Frank, and G. Mickwitz is greater than is apparent from acknowledgments made.

HISTORICAL SOURCES

Our knowledge of Roman accounting comes from three sources — legal, literary, and documentary. The most important legal source is the *Digest,* issued in 533 A.D., which contains numerous references to accounts. The general literature of the period is voluminous; however, only a few works are useful from an accounting point of view. Among them are those of Cicero, Cato, and Columella, which make specific mention of financial practices. Documentary sources fall into two categories: epigraphic, that is, written on stone or other durable materials, and papyrological.[2] These reveal how accounts were kept, though reference will also be made to certain accounts which have not survived.

Much is known of Roman financial affairs, and in particular, how business was conducted. Additionally, many problems which the Romans encountered are echoed in those of modern times such as debt, inflation, and currency and price controls. They, too, experienced repeated financial crises, periods of good and bad financial administration, reforming governments, progress, and decline. The Romans were considered a thrifty people and were meticulous in handling their affairs. The importance they attached to bookkeeping was characteristic of their singular caution in business relations and indicative of a scrupulous exactness to detail. Thus,

> . . . in the public accounts commanders registered the sums of money received from the enemy. . . . Magistrates and governors kept books of accounts. That this was considered important may be inferred from several well-known instances. Tiberius Gracchus was exceedingly anxious to recover his lost accounts. Cato Minor was exasperated at his failure to stand forth as a conspicuous example of an accurate governor when on his return from Cyprus his books were lost. Cicero notes as most suspicious that of those years of government during which Verres alleged that he had made numerous purchases he produced no accounts at all.[3]

The complexity of Roman life and the socioeconomic needs for control systems, together with intellectual attitudes which placed order and caution in business affairs at a premium, created a situation favorable

[2] G. E. H. de Ste. Croix, "Greek and Roman Accounting," *Studies in the History of Accounting,* ed. A. C. Littleton and B. S. Yamey (Homewood, Ill.: R. D. Irwin, 1956), p. 17.

[3] E. H. Oliver, *Roman Economic Conditions to the Close of the Republic,* Historical Studies (Rome: L'Erma di Bretschneider, 1966), pp. 130-31. The inference may also be drawn that, in many cases, accounting records were badly kept or accounting systems misused. Pliny made several references to inadequate supervision of financial affairs in his letters.

to the development of accounting in this period. Rooted, however, in a static economy with limited resources and production geared to consumption, one would expect to find (as one does) that the main function of accounting was to control staff and safeguard wealth. The deterioration of the traditional form of society based on a subsistence economy and the appearance of a capitalistic society geared to production for surplus and profit was a process forged at the anvil of time. Systematic accounting for profit making is a product of such a society.

ACCOUNTING FOR PUBLIC AND PRIVATE NEEDS

Accounting served the socioeconomic needs of a public and of a private nature in Roman days. As today, the financing of government had several accounting aspects, namely estimating required expenditures and raising and allocating revenue, as well as controlling and accounting for the funds involved. As far as the private sector was concerned, accounting records were required, and it was expected that each *paterfamilias* would keep records of receipts, expenditures, and liabilities. Economic activity centered on agriculture and farm accounts were kept. The aristocracy that directed Roman policy during the republic was almost wholly agrarian and militaristic and devoted itself to participating in public affairs, holding public office, and discharging political responsibilities. The Roman noble spent very little time on his own affairs, usually employing slaves to manage his lands and to receive legacies from his clients.

It is in the public life of Rome that one may look for the quintessence of Roman thought on the principles of management and the use of economic data as a guide to policy and decision making. There is evidence that there was a period of time when there existed an interest in the management of public finance which expressed itself in a quite sophisticated accounting technology and the use of fairly advanced concepts. By the time of the republic and the early days of the empire, the *aerarium* at Rome was the central repository of the people's money.[4] It was the equivalent of our modern Treasury, except that at any time revenues were held by the *publicani* who farmed taxes, and by governors of provinces prior to being paid.

In theory, all monies due to the state were under the control of the *aerarium,* and payments could not be made except under the authority of a *senatusconsultum,* the equivalent of an order of parliament. Such

[4] The *aerarium* was not a consolidated fund for all purposes; for example, there was a separate *aerarium militare*.

payments would be made under a vote to meet estimated and approved expenditure. To avoid losses in transit, however, as few coins as necessary were shipped, and authority by means of written warrants was given to draw on funds locally held. In effect, funds raised locally tended to be spent locally, and only surpluses were transmitted to Rome. The control of state income and expenditure nonetheless was based on accounts kept in Rome. The *publicani* and those governors who collected revenue accounted to the *aerarium* for their receipts, and all governors accounted to the *aerarium* for their expenditures.[5] Since no *aerarium* accounts have survived, the actual amounts of annual receipts and expenses and the manner in which they were recorded are not known.

The ingenuity the Romans brought to bear on the management of public finance may be detected also in the *alimenta*. This was a scheme designed to invest money from the *fiscus* in land mortgages and to use the annual interest in support of the poor throughout Italy. The *alimenta* also enabled farmers to secure loans at 5 percent.[6] Clearly, the administration of *alimenta* funds required the careful recording of mortgages, of interest due, and of allocation of funds to the local charity boards responsible for the distribution of monies.

The concept of creating permanent and separate funds for financing individual projects suggests a fair degree of accounting sophistication, involving the concept of separate finance allied to that of the sanctity of the designated funds. Recently the British government created the Road License Fund to finance road building and improvement by using the proceeds of motor vehicle licenses, and much consternation arose when Winston Churchill, as chancellor of the Exchequer, appropriated the fund for purposes other than that for which it was designated.

The creation by Augustus in 6 A.D. of a separate *aerarium militare* or military chest for payment of bonuses to retired soldiers can, therefore, be regarded as an accounting development of some significance. This chest was founded with a substantial contribution from Augustus's own funds amounting to 170,000,000 *sesterces* (4 *sesterces* were equal to 1 dinarius) and supported by the proceeds of a 1 percent sales tax

[5] A. H. M. Jones, *Studies in Roman Government* (Oxford: Blackwell, 1960), p. 103.

[6] Tenney Frank, *An Economic Survey of Ancient Rome,* 6 vols. (Baltimore: Johns Hopkins Press, 1940), 5:66. The *Oxford Classical Dictionary* suggests that "there is no reason to suppose that the landowners needed or even welcomed the loans (which laid a perpetual charge on their property)," p. 45.

and the institution of a 5 percent inheritance tax. On the basis that each soldier was to receive approximately 12,000 *sesterces* on retirement, the yearly flow of funds through the *aerarium militare* has been estimated at 75,000,000 *sesterces*.[7]

The concept of separate funds, now firmly established in business accounting by convention, and in some instances by law, may thus have had its original expression in governmental accounting. It is common practice currently to use designated funds such as the Preference Share Redemption Fund, and to limit their use to specified ends. Where convention is translated into law, as is done by the Companies Act in the example of the Share Premium Account, one is able to see the very strict limits which are placed on the recording of affected transactions and the use of funds directed to specified accounts.

Another interesting accounting concept which at one time excited the Roman mind is indicated by literary references to the publication of documents described as *rationes imperii*. None of these documents has survived, but they were apparently the general balance sheets of the empire. Augustus regularly issued them, but the view is that they were not a constitutional requirement, and Tiberius (14-37 A.D.) omitted to publish them toward the end of his reign.

The amount of paper work which accounting for the affairs of a huge empire involved required a large staff, and by the time of the empire there emerged the *fiscus* — a large organization, staffed by imperial slaves, freedmen, and procurators — which extracted monies due the emperor, made payments in his name, and controlled the funds at his disposal.[8] The same persons handled the emperor's public and private financial business so that the *fiscus* was, in effect, the whole financial administration controlled by the emperor.[9]

The accounts produced by these separate but complementary systems of state finance were doubtless based on receipts and payments, and one surmises that the *rationes principii* were not in fact balance sheets in the modern sense, but consolidated receipts and payments accounts. The attempt to present a total picture of the financial affairs of a large empire is noteworthy, but not enough emphasis can be placed on the significance of the *rationes principii* in view of the lack of knowledge of their contents, save as an indication that there existed a belief that citizens had an interest in receiving an account

[7] Frank, *Economic Survey*, p. 7.
[8] Jones, *Roman Government*, p. 107.
[9] P. A. Brunt, "The 'Fiscus' and Its Development," *Journal of Roman Studies* 56 (1956): 75.

of the management of public funds. In other words, the idea of accounting for stewardship already existed in the public mind.

PUBLIC AND PRIVATE SECTOR DIFFERENCES

Important differences exist between public accounting and accounting in the private sector. For our purposes interest must focus on the manner in which private accounts were maintained. To appreciate the essential nature of Roman accounting, however, an awareness of the social structure of that period is necessary. The Roman family was headed by the *paterfamilias,* who in earlier times had absolute control over all members of the family. The *patrimonium,* or property of the family, was vested in the *paterfamilias* who, according to Cicero, was expected to keep proper accounts of his domestic affairs. There have been suggestions that the *paterfamilias* was legally bound to keep records, but it is thought that this is an exaggeration, and that only those engaged in banking were legally required to keep proper books and to produce them in legal proceedings.[10] Nevertheless, books of accounts were called in evidence — presumably on the same basis as they are today, as prima facie evidence, which could be rebutted — of transactions between parties. According to Dionysius of Halicarnassus, every Roman had to take an oath once every five years before censors that his bookkeeping was honest and accurate.[11]

For all purposes, both social and economic units originated in the family. Early accounting records may be viewed as having a two-fold purpose — an internal one directed toward control of property, and an external one to provide evidence of rights and obligations. In the development of accounting thought, these twin purposes did not become evident at the same time due to the important role of legal procedures in Roman affairs.

From the earliest time of which there is record, the institution of private property was completely developed in Rome;[12] hence, it seems its acquisition and disposition would be covered by some recording process. But the early Romans were not in the habit of embodying their deeds in writing, and instead publicized transactions through formal ceremonies which ensured adequate deliberation by those involved — certainty as to terms, publicity of facts, and preservation of evidence

[10] de Ste. Croix, "Accounting," p. 44.

[11] Edward Poste, *Institute of Roman Law by Gaius,* 4th ed. (Oxford: Clarendon Press, 1904), p. 362.

[12] W. A. Hunter, *Introduction to Roman Law,* 9th ed. (London: Sweet and Maxwell, 1934), p. 48.

of the thing done and the words used.[13] There was, therefore, no need to record ownership of things that were public knowledge and which could be evidenced by witnesses.

The solemnities which marked the transfer of proprietary rights were also present in the creation of earlier forms of contractual obligations. The main contract in Roman law was the *stipulatio,* a formal contract depending upon the strict use of words of proposal and acceptance; unless these words were correctly employed, no obligation was created. Such contracts were entirely abstract, the circumstances which gave rise to them were unimportant, and the notion of valuable consideration was one which did not exist at first. The gradual extension of the use of writing played a significant part in the degeneration of the *stipulatio,* and led to the use of documentary evidence and to the admission that a written document incorporating the stipulatory phrase was a contract. Informal contracts also were eventually recognized and included loans for use (*commodatum*), deposit (*depositum*), and pledge (*pignus*). Subsequently too, certain consensual contracts were enforced, but there were only four of these — sale (*emptio venditio*), hire (*locatio conductio*), partnership (*societas*), and mandate (*mandatum*). The first three of these consensual contracts were, of course, essential to the expansion of trade, and they depended upon the concept of consideration for their validity.

The recognition at law of these informal contracts doubtless encouraged recordkeeping, but not too much can be made of this development as the expansion of trade itself; the consequent involvement of Romans in business affairs would itself lead to the need for recording receipts, expenditures, and debts due to others and owed from others.

An interesting feature of early law was the written contract, or contract *litteris.* It is important because it is the only contract in Roman law in which the writing was the contract itself and not merely evidence of it. Gaius makes a brief mention of it and it has been suggested that the contract *litteris* was already obsolescent by the second century A.D. This form of contract appears to have had two uses: the conversion of a preexisting debt into an obligation *litteris,* and the novation of an existing contractual obligation by substituting one debtor for another in the creditor's books. The contract consisted of an entry made in the creditor's ledger, known as the *codex accepti et expensi,* of a fictitious payment to the debtor.

---

[13] J. Muirhead, *Historical Introduction to the Private Law of Rome,* 3d ed., (London: A. C. Black, 1971), p. 63.

The existence of the contract *litteris* has caused debate among accounting historians, and one writer has suggested that transcriptive entries from one account to another were made by double entry so that one account must be debited and another credited.[14] The thesis that the contract *litteris* provides evidence of double-entry bookkeeping in Roman times has been disputed on the grounds that accounts were not kept in tabular form, but rather in narrative form, and that in any event separate debit and credit columns were not used. Although the contract *litteris* had a limited use and was superseded by the written acknowledgment of debt, it may be argued that its importance lies not so much as evidence of double-entry bookkeeping, but as confirming the existence of books of accounts and their use in creating debts by means of book entries. In the rationale of this view, the legal importance which is attached to accounting records is more crucial to the development of accounting than the manner in which accounts were kept.

Clearly there existed among Romans a commitment to the view that individuals holding positions of responsibility, whether as public officials or as heads of families, were accountable to those for whom they acted, and that the proper discharge of their duties was a mark of good citizenship. The inability to prevent abuse by those in whom responsibility was vested is equally clear. If one accepts the general thesis that societies develop laws to meet needs recognized in existing practice, then one could point to the contract *litteris* as an example of the growing importance attached to the written record. Curiously, however, the contract *litteris* was regarded by Gaius as obsolescent by the second century A.D., so that its duration may be directly linked to the period covering the last two centuries B.C. and the first two centuries A.D., a period regarded as representing the zenith of Roman bookkeeping. According to Pseudo-Asconius, an anonymous scholar of the fifth century, the custom of keeping full and exact accounts, common at one time, had by then entirely ceased.[15] The reason for the decline in bookkeeping is the practice of condemning men in the courts on the evidence of their books and the increasing burden of taxation, from the second century, on the *curiales,* who were the wealthiest members of the civic body but not a part of the imperial aristocracy. Accounts giving evidence of invisible property such as debts due attracted further tax burdens, and concealment of property became

[14] C. A. Smith, "Speculations on Roman Influence on the Theory of Double-Entry Bookkeeping," *Accounting Research* (1954): 337.
[15] de Ste. Croix, "Accounting," p. 48.

an economic necessity for this group. If this explanation for the decline in recordkeeping is valid, it serves to underline the importance and the credibility which at one time were attached to accounting records.

Roman accounts consisted of two types of records, the *adversaria* and the *codex accepti et expensi*. The *adversaria* was a memorandum equivalent to the basic record in modern accounting. The custom of entering data in a rough book seems to have been established at an early date, and although no *adversaria* records are extant, they doubtless contained all the details of transactions before entry into the formal ledger. In the permanent accounts, or *codex accepti et expensi,* were recorded those transactions involving the receipt and payment of money. The *codex accepti et expensi* was in effect a cash book, prepared at regular intervals from the *adversaria.*

The existence of a ledger in its present form was foreign in ancient times and indeed the first mention of anything resembling it occurs in early Renaissance Italy. The permanent accounts kept by the Romans covered no more than receipts and payments and the recording of debts. The existence of accounts for particular purposes is known; for example, those which guardians kept of their wards' property. Additionally, inventories of assets were also maintained, but in a descriptive form.

Scholars have paid particular attention to the manner in which records were kept in ancient times as indicative of the stage reached in formulating a system of recordkeeping which would permit rational control of business activities. Only a comprehensive system such as the double-entry procedure with its interlocking accounts permits the calculation of profits and some attempt to state the worth of a business. Although the Romans developed some quite advanced institutions in the fields of property law and commercial practice, their bookkeeping remained rudimentary in method, never developing into an integrated double-entry system or even into a unified single-entry system.[16] There is a sense, therefore, in which Roman accounting clearly belongs to an earlier epoch, and indeed one may safely assume from papyrological evidence of accounting in the third century B.C., as portrayed by the Zenon archives, that the system then in use reflected the spirit of accounting throughout the Roman period. The aim of this system of accounting, as we have already stated, was to control staff and property and to prevent either embezzlement or theft. When properly kept "no

[16] Ibid., p. 14.

single drachma or artaba of grain could be taken from the money chest or the grain stores without a record being made,"[17] and the owner could make checks of the stock at unexpected times.

The first difference between Roman accounting and modern accounting is the absence of the bilaterial form, for receipts and payments were not entered on opposite sides of an account.[18] Research has produced only one surviving document showing an ancient account drawn up in the bilateral form, and in this instance receipts and payments were not shown on opposite pages, but were separately aligned vertically and side by side within each page of writing.[19] Even in this account, no totals were attempted, and it is clear that the concept of striking a balance did not exist. Thus, although the account shows a separation of receipts and payments, it would seem as a general rule that this arrangement was not rigorously followed, and that consequently the bilateral form of account was an exceptional and incidental feature found in few ancient accounts.[20]

The second major difference lies in the absence of ledger accounts as such. Recordkeeping was merely an orderly narrative of transactions. Separated accounts were occasionally kept, but they were quite unrelated to each other and served the purely functional purpose of convenience. In the Zenon archives, separate money and grain accounts were maintained showing receipts and payments in money, and receipts and distribution of grain,[21] but this particular format followed from the double system of economy which operated on large estates.

Another difference lies in the terminology used. Roman references to terms translated as *debit* and *credit* are misleading in the context of the modern meaning attached to these terms. Romans did not think beyond the concepts of *receipts* and *expenditure* when narrating transactions, and they certainly did not conceive of the terms debit and credit as indicative of a transfer of *value* from one account to another.

Apart from the bilateral form of account mentioned above, the only other procedure relevant to modern accounting of which there are traces are occasional references to *petty cash* and evidence in at least one papyrus of the first century of a cross-reference to another ac-

[17] G. Mickwitz, "Economic Rationalism in Graeco-Roman Agriculture," *English Historical Review* 52 (1937): 579.
[18] de Ste. Croix, "Accounting," p. 20.
[19] Ibid., p. 21.
[20] Ibid., p. 37.
[21] Elizabeth Grier, *Accounting in the Zenon Papyri* (New York: Columbia University Press, 1934), p. 9.

count.[22] By and large, bookkeeping was of a primitive nature and in the management of their affairs wealthy Romans initiated the system of accounting in the administration of public finance rather than that designed for commerce.

Had the Romans been motivated toward commerce rather than farming, the development of accounting for the rational control of operations through profit calculation might have occurred in ancient times, for "rational commerce is the field in which quantitative reckoning first appeared to become dominant finally over the whole extent of economic life."[23] In commerce the necessity for exact calculation is most obvious, and a major interest in commerce might have revealed to the Romans the inadequacy of their system of numeral notation for this purpose and produced a breakthrough, which in fact occurred only in the Middle Ages.

The Roman system of numeral notation, although based as is ours on the decimal system, was very clumsy. A further defect was that it had no place or position value, so that individual symbols had to be repeated with much greater frequency than in a system such as ours. According to de Ste. Croix, "one important contributory reason for the backwardness of Graeco-Roman accounting . . . lies in the nature of the systems of numeral notation used by the Greeks and Romans."[24]

The shortcomings in the technical means of computation meant that accounting records by themselves could never be used for profit calculations, and the balancing of accounts which would have been necessary for this purpose could only have been completed with difficulty by the additional procedure of translating the figures to a counting framework.

It is a hypothetical question, of course, whether had the Romans been traders would they have succeeded in establishing a viable economy based upon commerce, thus adapting a system of numeral notation more compatible with efficient profit calculation so as to permit these to be affected not through separate counting devices but by means of the bookkeeping entries themselves. As things were, it mattered little from a bookkeeping point of view whether entries were made on two separate sides of an account or even whether the figures were put into precise columns, for they were not to be used for computation.

---

[22] de Ste. Croix, "Accounting," p. 35.

[23] Max Weber, *General Economic History,* trans. Frank H. Knight (London: Allen and Unwin, 1928), p. 223.

[24] de Ste. Croix, "Accounting," p. 50.

If the accounting procedures followed were too rudimentary for the rational control of business,[25] the Romans were nevertheless much interested in pursuing those activities which yielded the greatest profit, as the writings of Cicero, Cato, Varro, and Columella show. It is interesting to refer to these authors to obtain some conception of the financial notions which they considered important. This much is certain: they had a vested interest in the maintenance of their property, for upon it depended their qualification for office, in the case of senators. The concept of income was not separated from that of capital as a source of spending power, but the careful management of estates was thought to be the basis of financial well-being, and the authors addressed themselves essentially to this problem.

The fact that the Romans were oriented toward agriculture rather than commerce for the employment of their wealth had a number of serious consequences for the development of accounting. As a general statement, farming is an activity in which the calculation of profit is not as crucial to the continuance of operations as is business, and some important factors are not under the immediate control of the farmer. Thus, climatic conditions may adversely affect one year's operations against another, and farmers are accustomed to take good years and bad years together and to weigh the result against the trend of long-term expectations. Due to the seasonal and long-term pattern of activities, profit or loss is not so immediately apparent, nor is it given the same urgent importance as it would in a commercial operation. Another very important consideration is that farming requires a much greater initial investment of capital than does a commercial enterprise having a similar income potential. Once committed the capital is not as adaptable to changes in consumer demand, indicated by price changes, as is capital invested in commercial enterprises. Alternative investment opportunities open to the farmer are also more limited due to his strong sense of vocation.

Although Romans were interested in good husbandry, farming for profit was only a subsidiary consideration and much of what was produced was consumed by the household. The intention was that the

[25] The rational control of a business enterprise implies a system of scientific accounting by means of which objective decisions may be made. The rationale of these decisions is usually described as the "decision rule." The rationale of capitalist enterprise is the pursuit of profit by the use of wealth, and the decision rule applied to its management is profitability. A capitalist enterprise requires a scientific method for processing and analyzing financial data so that profitability calculations and decisions may be made. This scientific method is double-entry bookkeeping.

family should be self-sufficient, and Varro writing in 37 B.C. stressed that "nothing should be bought which can be raised on the place or made by the men on the farm."[26] With the subsequent appearance of large estates, exploitation of land and labor as a means of producing wealth for an absentee landlord gave rise to a capitalistic attitude toward farming, but these large estates were relatively few in number, and the accounting techniques employed were in no way different from those used elsewhere. The entries which were made in accounts remained rudimentary in character; they were not designed as an instrument to compute income.[27]

From an accounting point of view, it is interesting to compare the information to be found in the writings of the literary authors with that to be extracted from the papyri. Whereas the former explains the general directions they were recommending for the efficient deployment of resources, the latter reveals how the lack of technical skills in accounting prevented the Romans from achieving their objectives.

The works of Cato, Varro, and Columella are chiefly addressed to the problem of good husbandry, but additionally they contain much information revealing attitudes toward the management of estates at different periods of time. Good husbandry is not only the application of efficient farming methods to the use of land, but equally is thought to be the cultivation of those lands and crops which will give the greatest return on capital employed. Thus the price paid for the farm itself is determined only after calculating the possible income, and the choice is made on the basis of a relative comparison between price and yield on all available farms.[28] Cato's advice on this matter ignores entirely the question of price and overlooks the fact that the lack of prosperity in a particular district may not necessarily be due to poor lands and low yields but to bad farming. With modern accounting techniques, it is possible to assess the cost of restoration as part of the overall cost of acquisition to determine whether or not a farm thus situated is worth buying.

The inability to arrive at rational cost computations also affected the choice of crops to be cultivated. Cato's list of preferences is obviously linked to the profitability of each crop, but takes no account of individual circumstances which might cause the order to be altered. For

[26] Marcus Terentius Varro, *Rerum Rusticarum,* trans. W. D. Hooper and H. B. Ash (Hinemann, London: Loeb Classical Library, 1934) Book 1.22.1.
[27] Weber, *Economic History,* p. 224.
[28] Mickwitz, "Economic Rationalism," p. 583.

example, Cato does not mention the effect that a nearby town might have on the types of crops to be grown, nor indeed does he mention geographical conditions which might produce better yields of one crop opposed to another, and better aggregate profits. Nevertheless, Romans of this period were able to compare farming with other forms of investment and were also able to discuss the profit which specialization in farming brought about.

It is, however, in the manner in which profits were calculated by reference to cost allocation that the Romans signally failed to arrive at rational conclusions on the relative merits of particular types of activities. Columella, in his analysis of the profitability of vineyards as an investment, offsets against revenue the capital costs of acquiring the land plus two years' interest on the purchase price — but none of the current costs!

To members of a capitalistic society, the purpose of economic activity is primarily directed toward profit making. While the manuals show that the Romans were aware of the concept of profit, though in a very ill-defined form, the absence of accounting techniques by which to ascertain profits in a realistic manner prevented them from conducting operations on a rational basis and seeking those branches of agriculture which yielded the best profits.

There were other factors which inhibited the development of accounting in this period, however, and not the least of these was the ethos of Roman society which militated against the commercial spirit. Although great care was taken in financial matters, the capitalist spirit was not encouraged. Consequently, although commerce and industry were well established, they were not activities favored by the ruling class. When they did engage in trade, Romans usually operated through slaves and freedmen so that doubtless some of the great wealth which individuals did accumulate found its way into commerce and industry. There are, however, no records of large fortunes being made by entrepreneurs. Industrial production was extensive and diverse, though production on a large scale was to be found in only a few lines of manufacture. The financing of industry came from individuals, and although the existence of large numbers of associations is known, Rostovtzeff notes the "business life throughout the history of the Graeco-Roman world remained wholly individualistic."[29]

The anticapitalist ethos may also be seen in Roman law, which failed to encourage business in a number of ways. Corporation law

[29] M. Rostovtzeff, *The Social and Economic History of the Roman Empire* (Oxford: Clarendon Press, 1926), p. 159.

never developed to the point where vast sums could be combined in ordinary enterprises of industry and commerce. Only in the formation of companies to collect public revenue and to operate public property such as mines and salt works did the state permit and encourage fully fledged joint-stock companies. In addition to this limitation trade secrets could not be enjoyed because patent rights were not protected. Significantly, too, there was even a prohibition against senators engaging in commerce.

The consequences of the social, political, and legal influences which militated against industrial and commercial interests placed much lucrative business in the hands of foreigners and freedmen, but whatever profits they were able to make did not earn them any social position — financial power alone was quite inadequate to propel a man through the caste barrier.

CONCLUSION

In conclusion, the contribution which the Romans made to the development of the idea of accounting is interesting in some respects, though limited in others. Clearly they placed great emphasis on the maintenance of records which played an important part in the regulation of affairs. They were hampered, however, in their use of these records by the inability to formulate the necessary theoretical structure which would have enabled them to calculate profit accurately and thus arrive at more realistic conclusions concerning the profitability of operations. The failure to make a practical distinction between capital and revenue expenditures, and indeed to establish total costs without mentioning departmental costs, was a serious drawback to the efficient employment of resources. Nevertheless, the literature of Rome shows an awareness of the concept of operating efficiency both from a technological and from a financial point of view. The Romans, therefore, were faced with a technological gap between the ideas they entertained and the tools of analysis they developed. Had the elan of the golden period to the second century A.D. been maintained, the Roman contribution to modern accounting may well have been more significant. On the negative side, there were important institutional factors which in any event would have inhibited the development of accounting along the lines familiar to us, notably the bias against commercial profit seeking, legal constraints against joint-stock companies, and social attitudes toward the use and enjoyment of wealth.

The Roman contribution to the progress made toward the develop-

ment of modern accounting techniques was not significant. Although there was evidence of isolated bilateral accounts, occasional cross-references to other accounts, and mention of special accounts such as petty cash, there was no sign of those procedures essential to cost-profit calculations, such as balancing of accounts, personalization of accounts, or segregation of capital and revenue expenditure, all of which became central features of a system based on double-entry accounting. The constraint placed on computational procedures by the Roman system of numeral notation clearly hampered the use which could have been made of accounting records, and may explain why the Romans did not progress beyond rudimentary recordkeeping.

Development of Banking and Related Bookkeeping Techniques in Ancient Greece (400-300 B.C.)

GEORGE J. COSTOUROS*

The development of banking can be traced to the primitive societies of Sumer and Babylon where loans were made upon various kinds of security, mortgages were foreclosed, and there were deposits and trusts. But the Greeks, as a result of their peculiar political and economic environment, were the only people who developed banking in the modern sense. Unlike banking in other ancient societies and even in early England, Greek banking grew out of monetary transactions that were primarily purely financial. Greek bankers came into existence as a result of the introduction of coinage. The Greek word for bankers is *trapezitae,* which meant originally men at the table, and the word for bank is *trapeza,* meaning table or counter.

The banker began as a money-changer at some public spot near the market assisting businessmen involved in monetary transactions using different kinds of coins. With an increase in the volume of transactions the banker prototype was required to maintain a stock of various coins which forced him to develop facilities for the safekeeping of money and other valuables. These facilities, made even more attractive by their established reputation for honesty, made it convenient for persons to "deposit" their money with bankers and thereby protect their wealth from theft or other risks. Moreover, payments could conveniently be made through the bank to settle personal debts. Travelers could deposit excess money or could purchase an internationally ac-

* George J. Costouros is associate professor of accounting at California State University, San Jose.

ceptable coin to meet their various needs. The banker was also involved in collecting money on the accounts of individuals.

At first, no interest was paid on deposits. On the contrary, the depositor had to pay a fee for the safekeeping of his money. The banker soon found out, however, that he could use part of the deposits for loans to third parties since deposits far exceeded daily withdrawals. Then he realized that to increase his resources he had to make depositing more attractive by paying interest on the money. He could thus lend more money and make a profit on the difference between interest received from loans and interest paid on deposits. Such development took place during the fourth century B.C. This is when the bank of Pasio, the largest Athenian bank, was founded. In the *Trapeziticus* of Isocrates[1] and the speeches of other Attic orators, especially the private orations of Demosthenes, we find tremendous sources of information on banking transactions. The information indicates that banking transactions were complex, voluminous, and peculiar in nature, and that banking was the most advanced among the business areas included in the private sector. These factors forced the development of accounting methods that were absent or less developed among business entities dealing with production or distribution.

The development of banking during the classical period of Athens contributed to the expansion of credit for financing trade, individual transactions, other private businesses, and governmental entities. It was to the banking function that Athens owed part of her prosperity. The accounting methodology that developed was needed in determining obligations to creditors and claims against debtors, in controlling financial transactions, and in determining the liquidity of banks themselves. The expansion of banking institutions also reduced dependence upon individual creditors, who from the very inception of coined money exploited the financially weak.

The capital on which a bank operated appears to have been the property of an individual or the members of a partnership. The banker's liability, therefore, appears to have been personal in every instance regarding depositors, other creditors, or partners, never corporate. The purpose of keeping records on banking transactions was primarily to determine the liquidity position, to record receipts and payments on customer accounts, to establish accountability toward depositors, other creditors, and partners, and to control the investment

[1] Larue Van Hook, *Isocrates,* 3 vols. (Cambridge: Harvard University Press, 1954), 3: 210-49.

of money in productive resources. A bank's staff apparently consisted of one or more proprietors, one or two well-trained slaves or freedmen to serve as cashiers and bookkeepers, and as many ordinary slaves as the size and character of the business might render necessary.

Demosthenes — in his speeches *For Phormio, Against Stephonus I, Against Timotheus,* and *Against Callippus* — and other Attic orators provide us with a wealth of information about the nature of banking institutions and the system they employed to record their financial transactions. An example of such an establishment is the bank of Pasio and his successor, Phormio. From the above speeches of Demosthenes we learn that Phormio had been a slave in the employ of Pasio the banker, a notable figure in the business world of Athens in the early part of the fourth century B.C. Phormio had served as counter and manager of Pasio's bank in Peiraeus, had long managed the business of a shield factory also belonging to Pasio, and had in turn been rewarded by receiving his freedom. At the time of Pasio's death, Phormio was operating both establishments on lease from Pasio, who appointed him by will as guardian of his two sons, Apollodorus and Pasicles, until the second came of age. Phormio, who later married Pasio's wife, signed a lease agreement under the following terms: "Phormio is to pay to the sons of Pasio, as rental for the bank, two talents and forty minae each year above the daily expenditure, and it shall not be lawful for Phormio to carry on a banking business independently unless he first attains the consent of the sons of Pasio. And Pasio owes the bank eleven talents upon the deposits."[2]

Many allusions are made to the records and accounts kept by bankers, and we are fortunate to have a number of clear statements regarding methods used for entering various transactions in the books which indicate that they followed a predetermined pattern. Because the patterns were followed to achieve the aforesaid objectives, it may very well be stated that a system of accounting was used as a means to these objectives. For example, according to the speech of Demosthenes *Against Callippus* (360 B.C.) we are told that "it is the custom of all bankers, when a private person deposits money and directs that it be paid to a given person, to write down first the name of the person making the deposit and the amount deposited, and then to write on the margin 'to be paid to so-and-so'; and if they know the face of the person to whom the payment is to be made, they merely write down

[2] A. T. Murray, *Demosthenes: Private Orations,* 7 vols. (Cambridge: Harvard University Press, 1956), 5: 201.

whom they are to pay; but, if they do not know it, it is their custom to write on the margin the name also of he who is to introduce and point out the person who is to receive the money."[3] Here we see not only how transactions were analyzed and recorded in terms of their components (description and amount), but also the evidence required by a banker to execute a given transaction. The two sides of the entry were also indicated, as is made clearer in the following statement: "Phormio immediately showed him (Callippus) the books, and, when he had done so, and Callippus had read them, and had seen in them the entry, 'Lycon, the Heracleote (has deposited), sixteen hundred and forty drachmae, to be paid to Cephisiades; Archebiades of Lamptrae will identify Cephisiades', he went off in silence and for more than five months made no mention of the matter."[4] It seems likely that these transactions with depositors, recorded daily on special books as they were incurred, were further processed and summarized in such a way that the balance of each customer's account could be established. For example, it is mentioned in the same speech that "Lycon, when he was about to set out on a voyage to Libya, reckoned up his account with my father (Pasio) in the presence of Archebiades and Phrasias, and ordered my father to pay the money which he left to Cephisiades, saying that Cephisiades was a partner of his, but was for the time being abroad on another mercantile enterprise."[5]

Similar recording procedures are also mentioned in another speech of Demosthenes *Against Timotheus* (362 B.C.). Here it was stated that "bankers are accustomed to write out memoranda of the sums which they lend, the purposes for which the funds are desired, the dates and the payments a borrower makes in order that his receipts and his payments may be known to them (bankers) for their accounts."[6] Thus, we see again that financial transactions were recorded in the books chronologically in a way that allowed the bank to establish the account balances of its customers. If payments by the bank exceeded deposits made by the customer, the latter was in a debtor's position; otherwise he was a creditor. The systematic and accurate character of the bookkeeping procedures employed by Pasio's bank is strikingly demonstrated by the evidence his son Apollodorus presented in the above case against Timotheus for a debt. The case, introduced several years after the transactions occurred, covered transactions for

[3] Murray, *Demosthenes,* 6: 77.
[4] Ibid., p. 79.
[5] Ibid., p. 77.
[6] Murray, *Demosthenes,* 5: 379.

several years. The extreme accuracy of the accounting records is indicated by the court's acceptance of bankers' accounts as the primary source of objective evidence in support of the recorded transactions. For example, it is mentioned in the above case that "when the defendant (Timotheus) challenged me before the arbitrator, bidding me bring the books from the bank and demanding copies, and sent Phrasierides to the bank, I brought out the books and allowed Phrasierides to examine them and to copy out the entries of all the sums that Timotheus owed. I, therefore, brought the books to the arbitrator. Phormio and Euphraeus, who had paid the money to the persons designated by Timotheus, were present, and they exposed his falsehoods by showing the date at which he had contracted each loan, the person who received the money, and the use for which he expended it."[7] Similar permission to examine the bank accounts and to make copies of the entries covering the transactions in dispute was also given in the previous case of Apollodorus against Callippus. Accordingly, "when Callippus came for the first time to the bank, saying that Lyon was dead and that he, Callippus, claimed the right to inspect the books to see whether the Heracleote had left any money, he, Phormio, had at once shown him the books, and that Callippus, after seeing the entry that payment was to be made to Cephisiades, went away in silence."[8]

What is important about the above transactions is the way banks recorded them in the books. For example, the following four transactions indicate how Pasio's bank recorded payments or transfers of other resources made to third parties on account of its client Timotheus.

1. "It was Timotheus who borrowed the money from my father, and who bade him give it to his treasurer Antimachus, but the one who received the money from Phormio at the bank was Autonomus, who throughout all the time served as secretary to Antimachus. When therefore, the money was paid out, the bank recorded as debtor Timotheus, who had requested the loan, but made a memorandum in the name of Antimachus, to whom Timotheus had ordered the money to be paid, and also named Autonomus, whom Antimachus had sent to the bank to receive the money, the amount being one thousand three hundred fifty-one drachmae and two obols."[9]
2. "And my father, taking him (Philip) to the bank bade Phormio,

[7] Ibid., p. 403.
[8] Murray, *Demosthenes,* 6: 87.
[9] Murray, *Demosthenes,* 5: 381.

who was cashier, to pay Philip (a third party) the thousand drachmae, and to enter on the books Timotheus as owing that amount."[10]

3. "He (Philondas, a third party) approached my father and asked him to furnish the freight for the timber, in order that he might settle with the ship-owner, as Timotheus had begged my father to do, when he was about to sail and had introduced Philondas to him. So my father took him to the bank and ordered Phormio to pay him the freight of the timber, one thousand seven hundred and fifty drachmae. And Phormio counted out the money, and set down Timotheus as owing it (for it was he who had asked my father to furnish the freight for the timber, and the timber was his) and he wrote a memorandum of the purpose for which the money was received and the name of the person who received it."[11]

4. "My father persuaded him (Timosthenes) to accept the value of the bowls, as much as they were worth by weight, namely two hundred and thirty-seven drachmae. So he (Phormio) paid to Timosthenes (Timotheus' partner) the value of the bowls and entered on his books the defendant (Timotheus) as owing what he paid to Timosthenes for the bowls in addition to the rest of the debt which the defendant owed him."[12] In addition Timotheus had received in cash 100 drachmae so that his total debt to Pasio's bank, claimed by Apollodorus, amounted to 44 minae, 38 drachmae, and 2 obols, or 4,438 drachmae and 2 obols, summarized in his account, according to the above entries, as follows:

Paid to Antimachus (1 above)	1,351 Drachmae	2 Obols
Paid to Philip (2 above)	1,000 Drachmae	0 Obols
Paid to Philondas (3 above)	1,750 Drachmae	0 Obols
Paid to Timosthenes (4 above)	237 Drachmae	0 Obols
Paid in Cash (4 above)	100 Drachmae	0 Obols
Total Debt	4,438 Drachmae	2 Obols

Another source of valuable accounting information about banking practices and recording procedures is the *Trapeziticus* of Isocrates.[13]

It appears from the above sources that most banks kept daybooks, in which all transactions were entered as they were incurred (the journal), and ledgers, which showed how the account of each individ-

[10] Ibid., p. 387.
[11] Ibid., p. 393.
[12] Ibid., p. 395.
[13] Hook, *Isocrates,* 3: 210-49.

ual client stood. Although no complete description of the accounting system is provided, there is no doubt, based on the above transactions, that such a system developed and was used in recording entries in the books. Such a process included collecting, recording, classifying, and summarizing accounting information, and served to ascertain the bank's financial position, determined by the difference between the size of the resources employed and the amounts owed to depositors and other creditors, as well as the results of operations.

The Development of Accounting in Libya

MOHAMED M. BAIT-EL-MAL, CHARLES H. SMITH,
AND MARTIN E. TAYLOR*

The purpose of this paper is to describe the development of accounting[1] in the Libyan Arab Republic. The writers believe that Libya is interesting not only because of its "overnight" economic transformation from an aggregately poor to an aggregately wealthy nation, but also because this study can contribute to the meager amount of literature available on accounting in Africa and underdeveloped countries. The American Institute of Certified Public Accountants' publication, *Pro-*

---

*Mohamed M. Bait-El-Mal is a lecturer of accounting at the University of Libya, and is currently on leave of absence at the University of Aston in Birmingham (England) where he is working on a Ph.D. in Accounting. Mr. Bait-El-Mal earned his bachelor's degree (B.S.) at the University of Libya, and his master's (M.P.A.) from the University of Texas at Austin.

Charles H. Smith is a professor of accounting at Arizona State University. Professor Smith earned his bachelor's degree (B. Comm.) at the University of Cape Town, South Africa, and his master's (M.S.) and doctor's (Ph.D.) degrees from Pennsylvania State University. He is a South African Chartered Accountant and a Certified Public Accountant (Texas), and has contributed to accounting journals in North America and other countries (South Africa, Germany, Canada, Australia). Professor Smith is coeditor of *Accounting: A Book of Readings.*

Martin E. Taylor is an assistant professor of accounting at the University of Maryland at College Park. Professor Taylor earned his bachelor's degree (B. Comm.) at the University of Cape Town, South Africa, and his master's (M.B.A.) from the University of Texas at Austin, where he is also completing his doctor's degree (Ph.D.). He is a South African Chartered Accountant and a Certified Public Accountant (Texas), and has contributed to accounting journals in North America and South Africa.

[1] The main focus of the paper will be on financial accounting.

fessional Accounting in Twenty-five Countries,[2] contains information on only one country in Africa — South Africa — a country no longer considered underdeveloped. Further, Mueller's bibliography on international accounting lists sources for only five countries in Africa.[3]

Documentation of the accounting developments in Libya can contribute to the literature of underdeveloped countries and to that of Africa in general. Some of the information contained in this paper is based on the knowledge and experience of one of the authors, who is a Libyan national; he is also responsible for translating items available only in Arabic.[4]

HISTORICAL BACKGROUND AND ECONOMIC DEVELOPMENT

Libya is composed of three provinces and is approximately one-half the size of Europe or one-quarter the size of the United States. Libya has a population of approximately 1.9 million. It was an Italian colony from 1911 to the end of the Second World War. After the war, the country was ruled jointly by the British and the French. In 1951 the United Nations General Assembly passed a resolution recognizing the rights of Libya to independence under a monarchy. In 1969 the monarchy was overthrown, the army took control, and the country is now governed by a Revolutionary Command Council.

Before the discovery of oil in 1959, prospects for economic development were extremely bleak. Benjamin Higgins, a noted economist specializing in economic development who worked as an economic adviser to Libya in the early 1950s, had this to say about the country's economic condition and its economic prospects at that time:

> Libya's great merit as a case study is as a prototype of poor country. We need not construct abstract models of an economy where the bulk of the people live on a subsistence level, where per capita income is well below $50 per year, where there are no sources of power and no mineral resources, where agricultural expansion is severely limited by climatic conditions, where capital formation is zero or less, where there is no skilled labor supply and no in-

[2] AICPA Committee on International Relations, *Professional Accounting in Twenty-five Countries* (New York: American Institute of Certified Public Accountants, 1964).

[3] Gerhard G. Mueller, *A Bibliography of International Accounting,* rev. ed. (University of Washington, Seattle: International Accounting Studies Institute, 1968), pp. 63-64.

[4] Items of which translations were made are: The Libyan Commercial Code, the Libyan State Accounting Office Law, the auditor's report on page 93, the governmental accounts and report covered on pages 97-98, the article by Misbah Oreibi identified in footnote 28 on page 95, and the statistical abstract identified in the footnote of exhibit 4 on page 100.

digenous entrepreneurship. . . . Libya is at the bottom of the range in income and resources and so provides a reference point for comparison with all other countries.[5]

. . . If Libya can be brought to a stage of sustained growth, there is hope for every country in the world.[6]

Approximately 80 percent of the people were engaged in agriculture and animal husbandry.[7] Alternative employment opportunities were scarce, and those available were confined mainly to textiles and handicrafts. The few large enterprises in the country were controlled by Italian expatriates. The country's colonial background had the unfortunate result of reserving most of the skilled jobs for Italian immigrants as this group appeared to be more qualified than the indigenous population.[8] Very little seems to have been done to prepare the country for self-government. The educational and technical training of Libyans was neglected; to a large extent they were excluded from administrative positions in government and private enterprise.[9] Public finance for the period from 1942 to 1952 was characterized by deficits "met by grants-in-aid from the British and French administering powers."[10]

With the discovery of oil in 1959 economic prospects changed dramatically. Per capita income has climbed from below $40 in 1951 to $1,250 in 1968.[11] A new five-year agreement concluded in April 1971 between the oil producing and consuming countries should increase the per capita income even more significantly.[12] Oil production began in 1961 and has grown at a very rapid rate (see exhibit 1). Exportation of the major part of production has contributed positively to the balance of payments position. The very sale of oil has provided the necessary funds for a major development program to be financed by an allocation from oil revenue (70 percent of oil revenue after appropria-

[5] Benjamin Higgins, *Economic Development* (New York: W. W. Norton & Company, Inc., 1959), p. 26.

[6] Ibid., p. 37.

[7] Benjamin Higgins, *Economic Development,* rev. ed. (New York: W. W. Norton & Company, Inc., 1968), p. 819.

[8] Ragaei El-Mallakh, "The Economics of Rapid Growth: Libya," *Middle East Journal* (Summer 1969): 309.

[9] International Bank for Reconstruction and Development, *The Economic Development of Libya* (Baltimore: Johns Hopkins Press, 1960), p. 27.

[10] Economic Research Department, Bank of Libya, *The Development of Public Finance in Libya: 1944-1963* (August 1965), p. 11.

[11] U.S. Department of Commerce, *Overseas Business Reports* (September 1970), p. 23; El-Mallakh, "Rapid Growth," p. 308.

[12] Permanent Mission of the Libyan Arab Republic to the United Nations, *Libyan Arab Republic* (1971), p. 14.

Exhibit 1. Production and Sale of Petroleum — Selected Information*

Year	Production (in U.S. Barrels '000)	Exports (in Libyan Dinars '000)	Revenue (in Million U.S. $)
1961	6,642	4,097	..
1962	66,543	46,984	39
1963	161,272	116,861	109
1964	313,796	216,400	197
1965	445,252	280,331	371
1966	550,505	351,441	476
1967	632,601	416,426	631
1968	951,345	664,287	952
1969	1,134,451	771,857	1,132
1970	1,225,436	841,134	1,295
1971	1,927,226	956,867	2,072**

* Ministry of Planning, Census and Statistical Department, Libya, *Statistical Abstract 1968*, p. 140; Ragaei El-Mallakh, *Some Dimensions of Middle East Oil: The Producing Countries and the United States* (New York: American-Arab Association for Commerce and Industry, Inc., 1970), p. 9; "Libya's Nationalization of British Firm Shows Such Action No Panacea," *Wall Street Journal*, 3 February 1972; Bank of Libya, *Economic Bulletin* (May-June 1972); and *The Middle East and North Africa 1972-73*, 19th ed. (London: Europa Publications Limited, 1972).
** Estimated.

tions to general reserve).[13] Libya today is the fifth largest producer of oil in the world.[14]

According to El-Mallakh, "Seventy-five percent of the ordinary budget is derived from oil company payments."[15] It is not surprising, therefore, to find some concern in the government because of this lack of "balance." Industrialization of the Libyan economy and expansion of the agricultural sector are high priority items in Libya's economic development. The government initiated a number of measures to encourage the establishment of private industries. These included (1) import and export laws providing that the importation of competitive foreign goods be subject to license; (2) establishment of the Industrial and Real Estate Bank of Libya to provide Libyan businessmen with loans to build local industries; (3) formation of the Libyan National Industrial Corporation, a function of which will be the financing of new industries (including participation in industrial projects that the private sector is unable to initiate or implement); and (4) establishment of the Industrial Research Center to help implement the coun-

[13] Economic Research Department, Bank of Libya, *Economic Bulletin* (January-February 1971): 10.

[14] John Cooley, "Libyan Rulers Move Cautiously on Western-Oil-Firm Policy," *Christian Science Monitor* (October 28, 1968): 4.

[15] El-Mallakh, *Middle East Oil*, p. 8.

Exhibit 2. Distribution of the Development Budget (in Libyan Dinars '000)

	1971–72	1972–73	Three Years 1972–75
Agriculture and Agrarian Reform	50,400	53,000	165,000
Industry and Mineral Wealth	32,000	48,148	174,456
Oil	21,000	31,658	122,005
Electricity	21,500	32,000	103,000
Transport and Communications	39,800	47,000	163,780
Education and National Guidance	27,500	39,830	107,572
Health	17,000	13,830	47,000
Labor and Social Affairs	5,100	8,245	16,125
Housing and Public Utilities	40,000	51,737	124,762
Local Administration	31,800	30,000	99,000
Economy and Tourism	7,000	2,800	8,600
Information and Culture	2,700	6,155	15,410
Planning and Administration	2,100	1,700	4,600
Reserve for Projects	1,500	889	13,690
Total	300,000	367,000	1,165,000

try's development plan by providing technical and economic services in both the public and private sectors. Lack of skilled labor and the size of the market are factors limiting growth in the industrial sector. The population is presently about 1.9 million, the majority of which is not directly involved in the cash economy. As a result, Libyan companies find it difficult to compete with cheaper manufactured imports from Europe.[16] Possibly the economic integration agreement signed by the economic ministers of Libya, Egypt, and the Sudan on April 20, 1970,[17] will help overcome part of the limited market problem. Although these limitations are very real, the development budget for 1972-73 (see exhibit 2) reflects the government's determination to expand industry.[18]

Despite the discovery of oil, agriculture continues to play a major role in the economy, and a significant decision regarding this sector was taken in the 1970-71 development budget. Exhibit 2 shows that 50 million Libyan Dinars were allocated to agriculture, with the main

[16] Higgins, *Economic Development,* rev. ed., p. 823.
[17] Bank of Libya, *Fourteenth Annual Report of the Board of Directors: Financial Year 1969-70,* p. 39.
[18] Ibid., p. 113; and Economic Industrial and Agricultural Bulletin, *Tripoli Chamber of Commerce and Industry Bulletin* (September 1972), p. 11. The budget for industry was increased from 32,000 in 1971-72 to 48,148 in 1972-73.

objective being to expand the area of cultivable land and to develop land already cultivated.

Although Libya has experienced a great increase in its per capita income, it is still an underdeveloped country.

> In terms of the levels of living of the farmers and unskilled workers, who still constitute the bulk of the population, or in terms of the levels of health and education, Libya is still clearly an underdeveloped country.[19]

ENTERPRISE ORGANIZATION

Various types of business organization exist in Libya.[20] These include the individual enterprise, the general partnership, the limited partnership, the joint-stock company (similar to the corporation form in the United States), the limited company with shares (a limited partnership with capital in the form of shares), and the limited liability company (having a juridical personality of its own, but with capital contribution not in the form of shares). Exhibit 3 reflects the growth in the number of these organization types for the period 1963-69.

The Libyan Commercial Code (LCC) requires that all business enterprises operating in Libya be registered in the Commercial Register with the minister of economy.[21]

The LCC (article 58) requires that every enterprise have at least the following books: (a) a journal, and (b) an inventory and balance book. The Price Waterhouse & Co., monograph, *Information Guide for Doing Business in Libya,* describes these books of account:

> Journal, in which all transactions must be entered day by day; however, to facilitate bookkeeping, it is usual to maintain subsidiary journals (e.g., for cash and bank operations) of which the periodical totals are then entered in the master journal.
>
> Inventory and balance book, in which must be entered the annual balance sheet and profit and loss account; there are no regulations on this matter, but it is generally considered that the information entered in this book should be set out in reasonably informative detail.[22]

Before being used, the books must be notarized by the Court of First Instance.

According to article 570, corporations (joint-stock companies) are required to keep the following records: register of members, register of

[19] Higgins, *Economic Development,* rev. ed., p. 819.

[20] Ralph J. Giberr, "Legal Aspects of Doing Business in Libya," *Libyan Economic and Business Review* (Spring 1967): 38-39.

[21] *Libyan Commercial Code,* article 88.

[22] Price Waterhouse & Co., *Information Guide for Doing Business in Libya* (November 1961), p. 6.

Exhibit 3. Number of Establishments Newly Registered in the Commercial Register from 1963 to 1969*

Year	Companies**	Individual Ownership
1963	152	492
1964	184	298
1965	186	538
1966	275	846
1967	211	669
1968	189	679
1969	242	1,058
Total	1,439	4,580

* Ministry of Planning, Census and Statistical Department, Libya, *Statistical Abstract 1969*, p. 380.
** Including partnerships.

bondholders, minute book of members' meetings, minute book of directors' meetings, minute book of statutory auditors' meetings, minute book of executive committee's meetings (if there be such a committee), and minute book of bondholders' meetings.[23]

Although the Libyan Commercial Code has existed since 1953, many of the smaller companies still do not follow the above requirements. Recognition that many of the small firms do not have an adequate staff to implement the requirements of the LCC has led to leniency by the authorities.

Records kept by small enterprises (mainly sole-traders) are extremely scant. Double entry is for the most part not followed. In determining his profits or losses for a period, a trader will conduct a physical inventory of the merchandise and fixed assets at the end of every year, evaluate his receivables, and total his liabilities. (A salary for the proprietor is regarded as an expense of the business.) Comparison of the two net worth figures permits determination of the net gain or loss for the period.

A common form of small enterprise is the limited partnership. This type of firm has two classes of partners. The operating partners have unlimited liability while the liability of the other partners is restricted to the amount of their contributed capital. The majority of these organizations do not use complete double-entry bookkeeping. Two types of records are usually kept — a cash book and a ledger containing personal accounts. This system is generated by applying single- and double-

[23] Ibid., p. 7.

entry bookkeeping. Posting from the cash book to the ledger does not take place with every transaction.

The procedures for determining net income are the same as with individual enterprises except that salaries and wages are not considered. One-half of the profit or loss for the period goes to the working partners (enterprise management), who have unlimited liability. Salaries or wages for the period are charged against the management's share of the profit. The other one-half goes to all the partners (working and nonworking), and is distributed according to the capital balance ratio. Because of the lack of adequate accounting records, income taxes for these types of businesses are based on government estimates.

Medium- and large-sized organizations in Libya consist of general partnerships, limited liability companies, and corporations. In these types of organizations, accounting is considered a very important function. Qualified accountants and mechanized and electronic data processing systems are usually found in the accounting departments, especially in corporations. Although the main objective of these accounting departments is to record transactions and report financial statements, some management accounting exists. This includes internal reports and annual cash and production budgets.

In large companies accounting has developed largely as a result of foreign influence. Foreign companies or branches, American and British in particular, follow the generally accepted accounting principles of their home countries, subject to specific regulations of the Libyan government. These foreign organizations contribute to the development of accounting in Libya in two ways. First, their Libyan staffs are exposed to modern accounting in practice. Second, there is a "trickling-down effect" in that dealings between these companies and local enterprises lead to substantial improvements in the generally less-developed accounting systems of the latter.

EXTERNAL REPORTING AND AUDITING

In Libya there are three main sources of and influences on accounting practice: (1) governmental laws and regulations that control business in Libya; (2) accounting practices and principles from abroad — the United States and Britain in particular — through publications and the experience of qualified personnel and companies; and (3) impact of the writings of accounting academicians and practitioners in Libya. Banks have also had an impact on accounting practice. One of the most important requirements of a banker when considering a loan

application is for financial data about the applicant. Business enterprises need the service of banks to operate; consequently they try to supply adequate information. Banks, furthermore, give comprehensive information about economic conditions as a whole by publishing periodic bulletins. The reports of the board of directors are of great benefit to businessmen and accountants.

Every enterprise is required by the LCC (article 58) to prepare a balance sheet and a profit and loss account at least once a year. Most small enterprises, however, do not meet these requirements for the reasons mentioned earlier.

Corporations prepare and report their annual balance sheet and profit and loss account to the general assembly of shareholders and must submit a copy of the Commercial Register within thirty days of its approval by the general assembly. This is to be accompanied by the directors' report and auditing board report. (LCC, article 583.)[24]

Preparation of financial statements is the duty of the particular corporation's board of directors. The auditing board must perform the auditing procedures, examine the balance sheet and the profit and loss account, and write a report to the shareholders on the company's financial position and the board's evaluation of management performance. (LCC, articles 572 and 580.)

Article 573 of the Commercial Code details the items of assets and liabilities that must be included in any corporation's balance sheet.

Every corporation is required (LCC, article 547) to have an auditing board consisting of three to five members (shareholders or others). The members and the chairman of the board are elected by the general assembly of shareholders to serve for a term of three years (LCC, articles 548 and 550). This board is independent and responsible directly to the shareholders.

The auditing board is required (LCC, article 553) to:

1. Evaluate the company's management.
2. Ensure the correctness and reliability of the company's records.
3. Ensure that the balance sheet and the profit and loss account agree with the accounting records.
4. Check the company's assets once every three months.
5. Approve the balance sheet and profit and loss account.
6. Prepare the annual report on the company's financial position and management's ability.

Business and finance have grown significantly since the discovery of

[24] The auditing board is discussed in the section on External Reporting and Auditing.

oil, causing a substantial increase in the demand for accountants' services. Public accounting firms have increased in size and number. The number of university graduate accountants has increased as a result of both the establishment of the Faculty of Economics and Commerce in 1957 at the University of Libya, and also the return of many Libyans who graduated from universities abroad. As a result, many Libyan public accounting firms have been established. A few years ago all public accounting firms were branches of foreign firms, controlled largely by foreign head offices. Now the majority of these firms are Libyan.

There is no organized public accounting profession, but the Libyan government is considering the introduction of a new law concerning the public accounting profession. Such a law should increase the responsibility of public accountants, increase the reliability of external reporting, and improve the general level of accounting. Public accounting firms are currently regulated by the Liberal Professions Law. Any Libyan with a university degree in accounting and two years of experience in the field, either in private business or government, can become a public accountant.

The main function of public accounting firms is to audit the annual financial statements (balance sheet and income statement) of business enterprises, and express an opinion on the "correctness" of these statements. When auditing work is performed throughout the accounting period, monthly reports are submitted to top management on the company's accounting affairs.

ACCOUNTING PRINCIPLES AND AUDITING STANDARDS

Broadly speaking, accounting principles and auditing standards in Libya follow those of Britain — a derivative of British rule after the Second World War. Large firms and government advisers were British, and until the First of September Revolution in 1969, the director of the State Accounting Office, J. H. Newbegging, was a British Chartered Accountant.

The British have also influenced accounting education in Libya. The program in the Faculty of Economics and Commerce at the University of Libya, until recently, was completely of British orientation. Textbooks were mostly British, or were Arabic books either translated from English or written by Arabian professors who graduated from British universities.

During the last decade American influence has begun to replace that of the British. The discovery of oil has increased the American investment in Libya; American investment in oil reached $678 million at the end of 1968.[25] American companies are branches of parent companies in the United States, their accounting systems are completely American, and American generally accepted accounting principles are followed, subject to Libyan laws and regulations (Income Tax Law, Libyan Commercial Code, Petroleum Law, and Foreign Investment Law) controlling foreign business in the country.

The Faculty of Economics and Commerce at the University of Libya has changed its programs considerably during the past five years because of the changes in the faculty administration and teaching staff, many of whom have graduated from American universities. American textbooks in English or translated into Arabic have become widely used. Therefore, acceptance of American accounting principles in Libya may be viewed as the result of two forces: American companies operating in Libya and accounting education in Libya.

The American influence can be illustrated in the following auditor's report for a corporation.[26]

I certify that I have examined the balance sheet of ——— as of December 31, 1969 and the statements of trading, profit and loss and retained profits for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In my opinion, the accompanying balance sheet and the statements of trading, profit and loss and retained profits present fairly the financial position of ——— at December 31, 1969, and the result of its operations for the year then ended, in conformity with generally accepted accounting principles.

AUTHORIZED ACCOUNTANT AND AUDITOR

The terminology is very much that of a typical U.S. report, but it needs to be read with several caveats in mind. Because there is no organized public accounting profession in Libya two obvious questions are: Whose auditing standards and accounting principles? and By what set of professional standards (code of ethics, independence, etc.) are the activities of a Libyan auditor governed?

---

[25] U.S. Department of Commerce, *Overseas Reports,* p. 11.

[26] This is the actual report for the year ended December 31, 1969. The name of the corporation and the auditor (a Libyan) have been omitted.

LEGAL INFLUENCE ON ACCOUNTING PRACTICES

In Libya, as in many other countries, an attempt has been made to regulate accounting practice through direct legislation. Libya does not have a stock exchange. The major impact thus has come from the Libyan Commercial Code, Income Tax Law, and Petroleum Law.

Commercial Code

The Libyan Commercial Code was issued in 1953 and has since been amended a number of times. The code includes rules on corporation records and certain aspects of financial reporting and auditing. It also covers (articles 570 to 594) the following guidelines for the valuation of assets and liabilities, the creation of legal reserves, the changing of invested capital, and the distribution of profits.

1. The following valuation guidelines (articles 574 to 576) have to be followed. If a particular corporation is not able to do so, the reasons should be disclosed.

a. Fixed assets should be valued at original cost, and in every accounting period the value is to be reduced by related depreciation for that period. The code provides that accumulated depreciation be reported in the liabilities section.

b. Ending inventory should not exceed the lower of cost or market value.

c. Patent rights (inventions and concessions) and trademarks cannot be valued higher than cost. These values are amortized each accounting period on the basis of useful or legal life.

d. Bonds and shares should be valued by the directors,[27] and the method of valuation should be mentioned in the annual report of the auditing board to shareholders.

e. Debts are to be included at their estimated realizable value.

f. Bond discount *may be* recorded in the assets section. The amount should be amortized over the life of the debt.

g. Organization and development costs *may be* capitalized and amortized over a maximum period of five years.

h. Goodwill is to be recorded only if it is purchased. It should be amortized over a period decided upon by the directors and the auditing board.

Interestingly, the law requires that depreciation be reported on the liabilities section and not as a contra account in the assets section,

[27] There is no public stock market in Libya.

which is the normal method in accounting practice. Furthermore, the law considers the lowest purchase price (that occurred during the relevant period) of an item of inventory as the cost value prior to application of the lower of cost or market rule.

2. Five percent of annual net profits is to be retained as a legal reserve (article 577) until it reaches 20 percent of corporation capital. Legal reserves are basically appropriations of retained earnings, but have all the characteristics of permanent capital.

3. The legal capital may be increased or decreased subject to certain conditions.

a. The capital may be increased by issuing new shares or transferring the extra reserves to the capital and distributing stock dividends (article 590).

b. The legal capital may be decreased in either of the following cases: if the company has surplus capital or if the company has an accumulated loss exceeding one-third of the legal capital. In both cases the general assembly of shareholders must approve the decrease with no objection from creditors (articles 593 and 594).

4. Articles 496 and 579 provide that the founders of a corporation have the right to receive a maximum of 10 percent of the net profit, after deduction of the legal reserve, for a maximum of five years. The remainder of the net profit is distributed to the other shareholders.

Income Tax Law

The first Libyan Income Tax Law was issued in 1968. Previously, Italian income tax law was used with modifications to suit the Libyan situation.[28] The law has had an influence on accounting practice in that many companies have often adopted tax guidelines for general external reporting. For example:

1. Articles 54 and 20 of the Income Tax Law and the Implementing Regulations of that law respectively provide for depreciation to be deducted from net income using the straight-line method (specific rates for different types of assets are given).

2. Organization costs are to be amortized according to annual rates fixed in article 55 of the implementing regulations. The said regulations in article 21 provide that these expenditures be amortized over a period of from three to five years using the straight-line method.

3. Where the accounts for a year have been closed with a loss, such

[28] Misbah Oreibi, "New Income Taxes," *Libyan Economic and Business Review* (Spring 1969): 47.

loss shall be included in the expenses of the following year and deducted from its current profits. The loss balance shall be carried forward for a period to a maximum of five years (article 58 of the implementing regulations).

4. No distinction is made between operating income and extraordinary income. Article 64 of the law provides that the profit resulting from the sale of a business or of any of its tangible or intangible assets shall be deemed to be operating income.

Petroleum Law

The Libyan Petroleum Law as issued in 1955 and has been amended several times. The first article of the law states that all petroleum in Libya in its natural state in strata is the property of the Libyan state.

The accounting requirements for the oil industry are prescribed generally under this law. Profits are defined in article 14 of the law as the income resulting from a company's operations in Libya after deducting the following items:

1. Operating expenses and overhead, the details of which are defined in the regulations. Fees, rents, royalties, and income tax, and other direct taxes may be deducted.
2. Depreciation of all physical assets in Libya at the rate of 10 percent per annum and amortization of all other capital expenditures in Libya at the rate of 5 percent per annum. The undepreciated balance of physical assets scrapped or sold is to be deducted in the year when such assets are scrapped or sold.
3. Twelve and one-half percent of the value of crude oil exported. The 12.5 percent is calculated on the basis of the applicable posted prices (arbitrarily set by the government) of crude oil exported by the concession holder in any such complete year and on which royalties are payable by the concession holder in that year.

Item (8) of article 14 provides that in computing profits, sound accounting practices usually used in the petroleum industry shall be employed on a consistent basis. Where more than one such accounting practice prevails, the Ministry of Petroleum shall decide which practice is to be applied by the concession holder.

Oil companies are required to maintain and furnish the following records and reports:[29]

---

[29] *Libyan Petroleum Law,* 1955, second schedule, clause 20. (The second schedule is supplemental material to the law.)

1. A report to be submitted to the Ministry of Petroleum during the first quarter of each year concerning the progress of its operations in the concession area during the preceding year.
2. A statement of the general program that it intends to carry out during the following year. This statement should be submitted to the Ministry of Petroleum not less than thirty days before the end of each year.
3. Accurate financial records.
4. When oil or gas is discovered, an immediate report made to the Ministry of Petroleum.
5. Accurate geological and geophysical plans, maps, and records related to the lands within the concession area.[30]

ACCOUNTING FOR MACROUNITS — THE STATE ACCOUNTING OFFICE

The State Accounting Office is an independent agency reporting directly to the prime minister. According to the State Office Accounting Law (SOAL) published in November 1963, it consists of a director, who has a minister's privileges, an assistant director, managers, and technical and administrative employees. The members of the office must have a university degree either in law, economics, or accounting (SOAL, article 6).

The office controls the revenues and expenses of all the governmental agencies, different departments, organizations aided by the government, and other corporations to which the state contributes more than 25 percent of the capital (SOAL, article 18).

After examining all the governmental accounts, the director of the office prepares a comprehensive report on the audit's results. The following statements accompany this report:[31]

1. A balance sheet of the state as of the end of the financial year.
2. Comparative statements of actual revenues and expenses and budgeted appropriation for the particular year.

The auditor expresses an opinion on these statements. For the 1967-68 year the opinion took the following form:

The foregoing balance sheet as of March 31, 1968, and revenue and expense summary for the year ended March 31, 1968, have been examined by me.

[30] There is no indication as to *when* these are to be submitted. It is probably safe to assume that it needs to be done upon request.
[31] State Accounting Office, Libya, *The Annual Report of the Director of the State Accounting Office for the Financial Year 1967-68* (Tripoli, Libya: January 26, 1969).

They have been drawn up according to the rules of the State Accounting Office.

Other than what has been recorded in my report to that date, I have obtained all the data I asked for and I certify according to what has been indicated in this report, that the balance sheet with its assets and liabilities and the indicated summaries are valid and the procedures followed concerning payments and their endorsed documents are sound.[32]

DIRECTOR OF THE STATE ACCOUNTING OFFICE

Tripoli, January 26, 1969

ACCOUNTING EDUCATION

Accounting education in Libya operates at two levels: commercial preparatory and secondary schools, and the university. The commercial schools prepare the students for jobs as bookkeepers or clerks in both the public and private sectors. The Faculty of Economics and Commerce of the University of Libya is the only institute of higher learning that awards a bachelor's degree in accounting.

The period for the bachelor's degree is four years. The program covers the following courses:[33]

	Comparative program weights (%)
Accounting	39
Economics	17
Management and finance	12
Law	4
Statistics and mathematics	16
English	12
	100%

The accounting courses required to be taken each year during this period, plus in-class hours per week are presented below:

Year	*Courses*	*Hours per week*
1	Principles of accounting	5
2	Partnership and corporation accounting	5
3	Applied accounting (branches and cooperative accounting	3
	Cost accounting	3
	Tax legislation and tax accounting	2

[32] Ibid., p. 76.

[33] The University of Libya does not use the American system of course credit hours. Students take courses over an eight-month academic year, i.e., each subject is taken for the whole eight-month period. The comparative program weights have been developed on the basis of in-class hours.

4	Applied accounting (banks and insurance company accounting)	3
	Petroleum accounting	3
	Analysis of financial statements	2
	Auditing	3
	Managerial accounting	2
	Governmental accounting	2
	Research project in accounting	2

A total of 245 students (20-30 per year) graduated from the accounting department during the period June 1961 to June 1970.[34] Their graduation has done little, however, to ameliorate the acute shortage of accountants in the private sector, since most of the graduate accountants are hired as government employees. The significant growth in student enrollment in the Faculty of Economics and Commerce between 1958 and 1964 (see exhibit 4) appears to have reached an equilibrium.

It has already been mentioned earlier that although the British have contributed significantly to accounting education, the American influence has been increasingly felt during the past decade.

CONCLUSION

Industrial development has had a significant influence on the development of accounting in many countries and it is safe to expect the same for Libya. The potential effect of the U.S. oil companies has been discussed, but it is clear that the total prerequisites for accounting development throughout the economy have not been satisfied. Some of the important barriers are:

1. The lack of widespread industrialization.
2. The nature and size of business organizations.
3. The shortage of skilled accountants.

It can be argued that if the only major change between 1959 and 1972 has been in the growth of the petroleum sector, then further accounting development is not really necessary. The basis for this argument would be that, because eighteen U.S. oil companies account for 90 percent of Libya's oil production,[35] this sector is subject to the care of U.S. accounting and accountants, generally held in high regard.

This study has shown that there has been a significant growth in

[34] *University of Libya: A Brief Account* (Benghazi: University of Libya Publications, n.d.), p. 33.
[35] "Libya's Nationalization," *Wall Street Journal.*

Exhibit 4. Number of Students in Faculty of Economics and Commerce of the University of Libya* 1957-58–1970-71

1957-58	48
1958-59	112
1959-60	242
1960-61	311
1961-62	383
1962-63	423
1963-64	455
1964-65	431
1965-66	481
1966-67	480
1967-68	419
1968-69	435
1969-70	553
1970-71	681

* *University of Libya, Statistical Abstract* (May 1972), p. 8.

the number of newly registered business organizations. The number of skilled accountants available (the government continues to siphon off the major portion of graduate accountants) and the need to pay for accounting services, however, are barriers to the enforcement of even existing financial accounting regulations, for example, in the Commercial Code. Even the influence of banks tends to be minimal where ownership of the business firms is not that of widespread stock interests. Experience in many European countries has shown that banks are often intimately familiar with the affairs of their clients and that this tends to lead to minimum disclosure.

The most recent development program reveals a strong desire by the government to increase industry's contribution to the economy, and it is quite possible that development of both management and financial accounting will become widespread. Government planners need information on the activities of the business firms involved in the industrialization process, and credibility of such information is of paramount importance to facilitate accomplishment of national plans. This development program could therefore be the necessary impetus for further development of financial accounting and creation of a formal public accounting profession. There will be a need for external reporting even if the government participates in the industrialization process through state ownership of enterprises.

It is important to note that the basic components for an overall ex-

ternal reporting mechanism already exist. The Commercial Code and Income Tax Law cover such matters as accounting records as well as certain aspects of financial accounting and auditing. State-owned enterprises can be reported on by the State Accounting Office, but a formal public accounting profession needs to be established to cover those entities owned privately. Reference in an auditor's opinion to nonbinding (United States) generally accepted accounting principles and auditing standards is a weakness that must be overcome, as is the Commercial Code's auditing board concept.

Government action is needed to establish a public accounting profession and to improve the standards of the State Accounting Office.

U.S. Dollar Based Financial Reporting of Canadian Multinational Corporations

NORLIN G. RUESCHHOFF*

On June 1, 1970, the government of Canada permitted the Canadian dollar to float in foreign exchange value. Shortly thereafter three Canadian corporations with shares listed on the American and New York Stock Exchanges adopted the U.S. dollar for shareholder reporting. These corporations are Alcan Aluminum Limited, Massey-Ferguson Limited, and Asamera Oil Corporation Limited. Reporting by Canadian firms in U.S. dollars is nothing new; other Canadian corporations previously reported in U.S. dollars. In fact, five of the sixty-four Canadian corporations with common shares listed on the American and New York Stock Exchanges were reporting in U.S. dollars before the Canadian government's decision in 1970 to float the Canadian dollar.

A brief history of Canadian dollar fluctuations and the years in which Canadian firms adopted U.S. dollar reporting is presented in exhibit 1. Ironically, none of the corporations used U.S. dollar reporting when incorporated. Except for Canadian International Power Company Limited, which until 1966 reported in dollars at the rate of one U.S. dollar to one Canadian dollar, the corporations had to provide some rationale for switching the dollar reporting base.

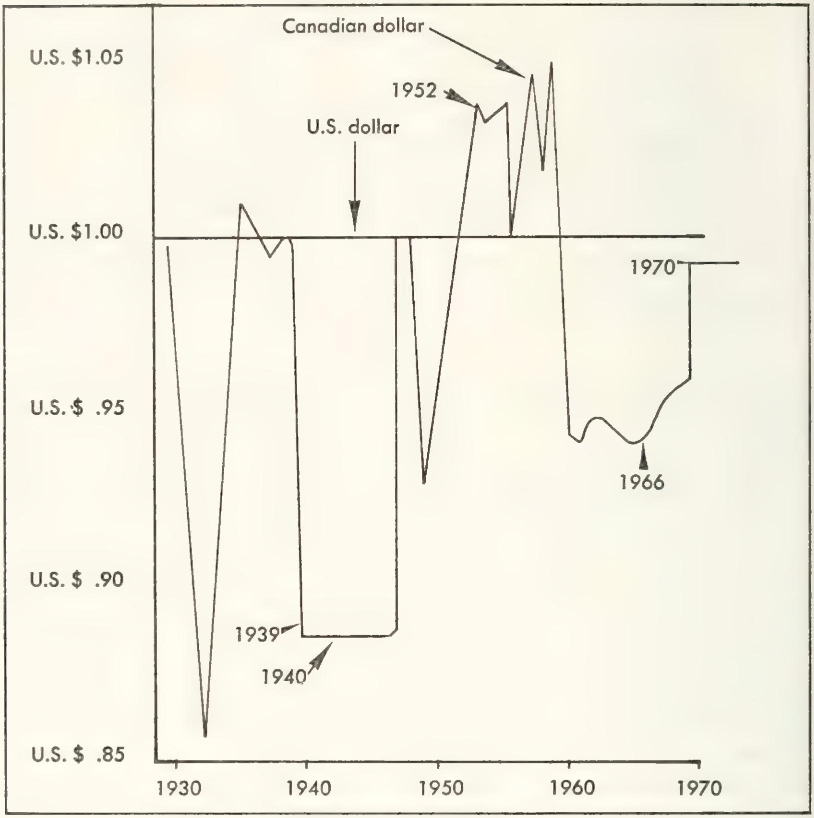
REASONS FOR SWITCHING THE CURRENCY BASE FOR REPORTING

Legal Basis Abandoned

Gerhard Mueller lists five possible currency bases that may be ap-

*Norlin G. Rueschhoff, Ph.D., CPA, is an associate professor of accountancy at the University of Notre Dame, Indiana.

Exhibit 1. History of Canadian Dollar Fluctuations in Relation to the U.S. Dollar and the Years of Adoption of U.S. Dollar Reporting by Canadian Corporations with Common Stocks Listed on New York and American Stock Exchanges



propriate for international financial reporting to investors. They are (1) the legal basis, (2) the transaction basis, (3) the ownership basis, (4) the dividend basis, and (5) the monetary basis.[1] It is apparent that the nine Canadian corporations shown in exhibit 1 have decided against continued use of the legal basis, whereby the currency corresponds to the country of incorporation. They have abandoned Canadian dollar reporting.

[1] Gerhard G. Mueller, *International Accounting* (New York: Macmillan Company, 1967), pp. 208-12. The imaginary currency basis mentioned by Professor Mueller is not applicable to this study.

First Year of U.S. Dollar Reporting	*Name of Corporation and Year of Incorporation*
1929	International Nickel Company of Canada, Limited (1916)
1939	Brascan Limited (formerly Brazilian Traction Light and Power Company — 1912)
1940	Distillers Corporation-Seagrams Limited (1928)
1952	Hiram Walker-Gooderham and Worts, Limited (1926)
1966	Canadian International Power Company Limited (1956)
1970	Alcan Aluminum Limited (1928)
1970	Asamera Oil Corporation Limited (1925)
1970	Massey-Ferguson Limited (1891)
1970	Total Petroleum (North America) Limited

Source: Corporate annual reports; *Moody's Industrial Manual* (New York: Moody's Investor Service, Inc., 1971) and previous issues; and *Moody's Public Utility Manual* (New York: Moody's Investor Service, Inc., 1971) and previous issues.

Monetary Basis

Without delving too deeply into the exhibited companies' underlying motives, one could speculate that the monetary basis was used to justify switching to U.S. dollar reporting. After all, the U.S. dollar was stable for a long time. The remarks of several corporate directors provide some evidence. For example, Alcan Aluminum Limited reported the following:[2]

> Alcan's directors decided to express Alcan's financial statements in terms of United States dollars rather than Canadian dollars, in order to give a fairer picture of the Company's world-wide business. A company such as Alcan, which operates in many parts of the world, requires a consistent scale for measuring its financial results.

As early as 1939 the Brazilian Traction Light and Power Company (now Brascan Limited) gave similar reasons:

> These financial statements and the results for 1939 on this and the next following page are there shown in such currency which the Board feels will give a clearer understanding of the position.

The Brazilian Power Company in 1939 gave consideration to the decline in the exchange value of the Canadian dollar. But, why in 1970 should a corporation abandon Canadian dollar reporting when the exchange value of the Canadian dollar was increasing (see exhibit 1)? The real issue is apparent from the following comments from the Massey-Ferguson Limited 1970 annual report:

> During the period when the Canadian dollar was a fixed rate in terms of U.S. dollars, that is from May 1962 until the end of May 1970, this method

[2] This and the other quotations in this article were excerpted from the corporate annual reports of the corporations mentioned.

of reporting did not result in any major distortions due to exchange adjustments. However, with a Canadian dollar floating in relation to all other currencies, significant variations in the exchange rate will result in exchange differences that are unrelated to actual operations and would have a distorting effect. For example, if the company were to continue to prepare its financial statements in Canadian dollars, a variation of one percentage point in Canadian exchange would affect net income by approximately $2,000,000; and applying the exchange rate that existed at October 31, 1970, a reduction of 1970 earnings of approximately $10,000,000 would have resulted due simply to the change in valuation of the company's net assets outside Canada.

A similar situation occurred in 1952, as shown by the comments of Hiram Walker-Gooderham and Worts, Limited, which switched to U.S. dollar reporting that year:

If the procedure followed in presenting the financial statements for the 1952 fiscal year had been adopted for the preceding year, the net earnings for that year would have been $19,970,821 in United States currency as compared with $21,816,722 in Canadian currency before provision for unrealized foreign exchange losses of $944,532. However, if the net earnings for 1952 had been computed on the basis followed in consolidation in previous years, the net earnings before unrealized foreign exchange losses arising in consolidation of $8,762,864 would have been $15,923,218. In view of the materiality of this exchange adjustment of $8,762,864 in relation to the net earnings for the year, the Company would have charged this amount against Earnings Retained and Employed in the Business.

The net result of all foreign exchange transactions and adjustments for the fiscal year ended August 31, 1952, was a credit of $72,716 which is shown on the consolidated statement of income and expenses as Foreign Exchange Adjustments.

Transactions and exposure in foreign currencies cause these foreign exchange losses, and these transactions seem to be the basis for using U.S. dollar reporting.

Transaction Basis

A company may choose to use the currency of the country where most of its business transactions take place, such as Distillers Corporation-Seagrams Limited did in 1940:

A very substantial majority of the assets, liabilities, sales, and earnings reflected in the Consolidated Statements originate in the accounts of subsidiaries in the United States, and in view of differences between the currencies of Canada and the United States it was deemed desirable to express our financial statements at July 31st, 1940 in United States currency.

In 1970, both Total Petroleum Limited and Asamera Oil Corporation Limited switched currencies of account for the same reasons. Total Petroleum changed to U.S. dollar reporting after acquiring U.S. dollar

assets amounting to over one-half of the company's assets in a merger. Asamera simply stated:

Since substantially all of its operations are transacted in U.S. dollars the Company feels that it would be more appropriate to express its financial statements in U.S. dollars.

If the transaction basis is used to justify the change, the investor may have cause to wonder why the change has occurred at that particular time. In the case of Total Petroleum Limited, the merger took place in 1970. For International Nickel Company of Canada, Limited, operating assets located in the United States were transferred to its control in 1929. The quantity of U.S. transactions increased because of these major organizational changes. These and other considerations may have been involved in the decision to change.

Ownership Basis

One consideration could be the citizenship of shareholders. Ownership would seem to be a popular basis for choice of currency. After all, the annual report is prepared for the owner, that is, the stockholder. But serious shortcomings beset the use of ownership as a basis for choosing currency. For one thing, ownership interest may change, and for another, a multinational corporation may have shareholders domiciled in many different countries. Moreover, the firm may not necessarily invest and operate in any particular country at a continuous or stable rate.

Below are a number of large Canadian corporations evidently agreeing that ownership is not a justifiable basis for choosing the central currency of account. These corporations have stocks listed on either the New York or the American Stock Exchange; yet they use Canadian dollar reporting although well over one-half of their shareholders are not Canadian.

Name of Canadian Corporation	*Percentage of Ownership by Nonresident Companies and Persons in 1965*
Banff Oil Limited	83.8
Canadian Superior Oil Limited	87.1
Dome Mines Limited	70.6
Dome Petroleum Limited	62.1
Ford Motor Company of Canada, Limited	89.6
Hudsons Bay Oil and Gas Company, Limited	70.8
Husky Oil Canada Limited	54.6
Imperial Oil Limited	75.0
Preston Mines Limited	87.9

In contrast, the 1965 Canadian ownership of seven of the nine previously mentioned corporations using U.S. dollar reporting was as follows:

Name of Corporation	*Percentage of Canadian Ownership in 1965*
Alcan Aluminum Limited	31.1
Brascan Limited (formerly Brazilian Traction Light and Power Company)	58.4
Canadian International Power Company Limited	26.6
Distillers Corporation-Seagrams Limited	82.1
International Nickel Company of Canada, Limited	27.9
Massey-Ferguson Limited	68.1
Hiram Walker-Gooderham and Worts, Limited	72.1

As shown in the above tabulation,[3] only Alcan Aluminum Limited, Canadian International Power Company, and International Nickel Company of Canada would have justification to use U.S. dollar reporting if ownership were the basis for selecting the reporting currency of account. When Alcan Aluminum Limited switched to U.S. dollar reporting in 1970, U.S. ownership had dropped to 47.8 percent from 55 percent in 1969 and 53.6 percent in 1968. This suggests that the Canadian corporations do not consider ownership basis the key criterion for selecting the currency of account.

Dividend Basis

The dividend basis could provide another alternative for choosing the currency base. Under this concept financial statements would be prepared in the currency in which the dividends are paid. Historically, International Nickel Company of Canada Limited (except for a short period in 1931) paid dividends in U.S. dollars since 1928 when it switched to U.S. dollar reporting. Canadian International Power Company Limited has paid dividends in U.S. dollars since the second quarter of 1966, the year it switched to U.S. dollar reporting. Alcan Aluminum Limited has paid dividends in U.S. currency since December 1950, although it did not adopt U.S. dollar reporting until 1970. In contrast, Brascan Limited adopted U.S. dollar reporting in 1939 but did not pay dividends in U.S. currency until 1968.

It should be noted that, of the other Canadian corporations using U.S. dollar reporting, Hiram Walker-Gooderham and Worts, Limited,

[3] The ownership data were obtained from a 1965 study commissioned by the Toronto Stock Exchange, "The Supply of, and Demand for, Canadian Equities" (unpublished manuscript, undated).

Distillers Corporation-Seagrams Limited, and Massey-Ferguson Limited continue to pay dividends in Canadian dollars. (Deltec International Limited, Asamera Oil Corporation Limited, and Total Petroleum Limited did not pay dividends in 1970.) On the other hand, two corporations, Granby Mining Company Limited and Northgate Exploration Limited, have paid U.S. dollar dividends since 1939 and 1968 respectively although they continue to express their financial statements in Canadian currency. One can conclude that dividend considerations certainly are not the key element in the reporting currency decision.

SUMMARY AND CONCLUSIONS

Monetary Transaction Basis

When one studies the switch to U.S. dollar reporting and the fluctuations in exchange rates (per exhibit 1) and looks for the motivation, it becomes evident that the determining factor is what currency is used in the majority of transactions. This is a newly identified basis for determining the currency of expression, and may be simply stated as the "monetary transaction" basis.

Normally, monetary transactions take place in the country of incorporation and most corporations continue to use the legal basis, expressing the financial reports in their home currency. Only the multinational corporations must choose the proper currency base.

New Perspective for Multinationalism

For a Canadian firm to change to U.S. dollar reporting at a time when the U.S. dollar has weakened suggests that management has failed to hedge its U.S. dollar assets. Alternately, management did not do so because their thinking and decision making was done in terms of the currency in which most of the business transactions were recorded. How else could one justify a Canadian management reporting to stockholders, the majority of which are Canadian, hedging against a loss in Canadian dollar exposure? Rather, these managements must be considered multinational.

This multinationalism gives the whole enterprise a new perspective. Once the multinational management chooses its currency expression based on the firm's monetary transactions, it must hedge against exposure in all other currencies, even if it means hedging in currency of the country of incorporation.

The Current State of the Accounting Profession in Italy

FREDERICK J. ZAPPALA*

Incongruous as it may seem, the land that gave birth to accounting is one of the last Western nations to develop the profession of public accounting. Although there are many accountants (*ragioneri*) and commercial experts (*dottore commercialisti*) the concept of auditing is virtually unknown, except in the international public accounting firms with offices in Italy. This is so despite Italy's industrial growth after World War II, and despite the tremendous potential for further industrial growth in the mezzogiorno area.

During the past year the author spent several months in Italy visiting major international firms, and Italian firms and universities. This paper, the result of many discussions with professional accountants, university professors, and students, thus represents a consensus of opinion on existing conditions.

Each of the major international accounting firms maintains offices or representatives in Italy. Much of their work is in auditing American or other foreign subsidiaries, or in connection with acquisitions by foreign companies of Italian firms. In the latter case several years must elapse before unqualified opinions can be rendered. There are a limited number of audits of Italian firms, but these are generally in connection with the issuance of securities in foreign markets or with contract proposals being made by Italian firms outside Italy. Generally accepted accounting principles and auditing standards are followed in these in-

* Frederick J. Zappala, CPA, is an associate professor of accounting at Boston College, Chestnut Hill, Massachusetts. He is a member of the American Institute of Certified Public Accountants and of Beta Gamma Sigma.

stances with no difficulties in making confirmations, observing inventory, and so forth. The basic service rendered to Italian firms by the international accounting firms is management consulting. Several firms indicated that management consulting would be the avenue to growth in auditing engagements, which is the reverse of the experience in the United States.

The major causes for this lack of progress may be summarized by contrasting developments in the United States and Italy. Industrial growth in the United States was accompanied by extensive use of commercial paper. U.S. banks first required certification of balance sheets by independent auditors and then statements of the firm's profit earning potential as a basis for granting loans. Italian banks neither require certification of statements, nor consider the earning potential of the enterprise. Loans are made solely on the basis of collateral. In addition the Italian government has made direct loans to industry as part of its economic policy. The excesses in the United States during the 1920s led to the Securities and Exchange Act which required an independent audit of companies listed on the stock exchange. No such requirements exist for listing on Italian exchanges. Listing requirements in Italy are concerned with minimum capital, lack of arrears in dividend or interest payments, profitable operations for the two past years, and stockholders' approval of the statements. Although Italian law provides for a board of statutory auditors, the law does not define an audit, and the function of the board has evolved into counting the cash and making social visits with the board of directors. Public ownership of companies is widespread in the United States; it is a rarity in Italy. Most companies are family held and therefore an audit is of no interest. To complete the contrast, one must add the Italian penchant for playing the game of tax avoidance or evasion. Since this game is a part of industrial and commercial life, it is not uncommon for concerns to have two or more sets of records. The logical extension of such practices is to inhibit growth of managerial personnel since authority and responsibility are not delegated. Carried to the extreme, such practices result in situations where top management itself is unaware of the actual operating performance of the company. Most of the unrecorded and unreported profits are drawn from the company and invested in other countries.

The Italian government has created a favorable bond market and as previously mentioned has made direct loans to industry, thus obviating the need for companies to raise equity capital. Furthermore, bonds are issued to bearer, but most shares of stock must be registered. Bonds thus are a convenient way of hiding income. Even without these con-

ditions, the almost universal lack of faith in the integrity or the validity of published statements would make a stock offering a failure.

Education in the professional area at first glance appears ideal. *Technici,* the equivalents of our high schools, offer five years of accounting (*ragioneria*) and related subjects, and most universities offer majors in economics and commerce. Conversations with students and recent graduates, however, reveal that these courses are taught from a historical and a theoretical viewpoint, and are devoid of any cases or problem solving. Since auditing is virtually unknown, no courses are offered in this area or the related field of internal control. Italians employed by international accounting firms confess that their education, if it included the *technico* of *ragioneria,* made them good bookkeepers. Their knowledge of accounting principles and auditing procedures has come from staff and on-the-job training with their employers. The training period from junior to senior level runs five or more years.

In an article in a recent issue of *Successo,*[1] Alessandro Quaranta analyzes the deficiencies of university education. He points out that no efficient or institutionalized relationship exists between the university and industry, nor in fact between the university and any other social agency, and that industry has no means of influencing university curricula or a student's choice of study. He further discusses the reluctance of the university to allow outside influences to condition curriculum changes, and the rigidity of a curriculum where the most minor change cannot be made at less than a three-year interval. This arbitrary time limit has no relationship to the rapidity of change in a dynamic contemporary society. When changes are made, new courses are created without elimination or modification of existing ones, some of which are obsolete if not totally useless. Although they have representation on the university governing board, government agencies have failed to exert any influence. The indifference of government and industry especially has caused real damage to industry itself. University graduates require extensive additional training to round out their inadequate university training.

One large Italian firm has a two-month educational program, at a nearby university, for its employees. This costly approach is evidently limited to the more affluent firms. Smaller firms resort to hiring personnel with experience in larger firms. The experience of public accounting firms parallels that of industry. After public accounting firms make

[1] Alessandro A. Quaranta, "University and Industry Lack Bridge of Understanding," *Successo,* int'l. ed. (March 1969): 72-77.

a significant investment in training their personnel, industry's demand for trained persons creates a substantial turnover.

A sample of ninety-four Italian nationals employed by the eight largest international accounting firms reveals the following:

1. The average age of the employee is twenty-nine years.
2. The majority of the employees fall in the junior category. The breakdown of the sample is: juniors, 46; semiseniors, 10; seniors, 19; supervisors, 2; and managers, 17.
3. Of the 19 seniors, 12 had been with the firm five or more years, and 7 between three and four years. In the latter case, the individuals had been employed previously in industry, and were able to progress more rapidly.
4. More than one-half of the sample had the combination of the *technico* of *ragioneria* and a university major in economics and commerce. Fourteen percent had studied *ragioneria* alone without further studies, and the remainder had a combination of classical or scientific studies at the lower level with university degrees in economics and commerce, law, or statistics.

International public accounting firms have also followed industry in other respects. Until recently they have had no contact with the university or university faculty and have not considered influencing university curricula or the Italian segment of the profession. In fact, they have had very little contact with each other and practically none with their Italian counterparts. It would seem that many opportunities have been missed because of this lack of cooperation.

Within the past two or three years some hopeful stirrings have occurred in the Italian segment of the profession. A committee of *dottori commercialisti* and university faculty, organized as a center of study and information on auditing and the certification of statements, has been meeting to prepare recommendations concerning (1) the restructuring of financial statements and (2) the principles or norms on which such statements will be prepared and certified. Some committee members are employees of international accounting firms and their training and experience is in auditing as we know it. Perhaps this is how the Italian profession will gain influence.

The first portion of the study has been completed and the recommendations of the study group have been forwarded to the directors of the Association of Commercial Experts (*Ordini dei Dottori Commercialisti*). A proposed balance sheet and several proposals for income statements are included. The balance sheet and one of the income

statement's proposals are given in exhibit 1 on pages 116-19. They differ significantly from the forms currently used. These are shown in exhibit 2 on pages 120-21.

Legislation pending in the Italian Parliament would reform the Companies Act and would require the certification of statements by companies listed on the stock exchange. Also pending is legislation designed to reform the tax structure to conform with European Common Market requirements. Dr. Antonelli, president of the Association of Commercial Experts, is confident of the passage of these bills or similar reform measures. He prefers a situation where the certification of statements would make such statements acceptable for tax authorities.

There are also hopeful stirrings in the educational field. Several of the international firms have been approached by two different universities to conduct auditing courses or seminars. This is an opportunity in which cooperation among firms could be most productive. Bocconi University in Milan, by reputation the best in economics and commerce and a private university, has made changes in its curriculum during the past year, adding cases, problem solving, and group discussion in some of the courses offered. Furthermore, seminars with outside professional people have been inaugurated. These innovations have been made known to the minister of education and may influence the curricula in state universities.

In addition numerous articles on the necessity of commercial reform have appeared in Italian journals such as *Mondo Economico* and *L'Impresa*. Bruno Gimpel, writing in *Mondo Economico*,[2] states that certification of financial statements will become an accepted fact of Italian financial and economic life, and that reform in this area is illogical without tax reform. His article further points out the need for certification and the qualifications required by the certifier. Pio Bersani, in an article in *L'Impresa*,[3] discusses the need for reform of the Companies Act; the professionalism, independence, and other attributes of the auditor; the need for internal control systems within companies; and related matters.

Should these hopeful portents come to fruition we would witness a vital growth in the Italian and international segments of the accounting profession, and the accrual of many benefits to Italian industry and economy.

---

[2] Bruno Gimpel, "La Certificazione dei Bilanci," *Mondo Economico* (October 28, 1967): 2-4.

[3] Pio Bersani, "Il Controlli Della Societa Nel Progetto Di Reforma Delle Societa per Azione," *L'Impresa* (January-February 1970): 81-83.

Exhibit 1. Illustrative Balance Sheet, Italian Company, Date

ATTIVO (assets)		
Attivo Disponbile (current assets)		
Cassa (cash on hand)		X
Banche (cash in bank)		X
Titoli (securities)		
Titoli a reddito fisso (fixed income securities)	X	
Titoli diversi (other securities)	X	
Totale	X	
Fondo oscillazione titoli (allowance for fluctuation)	X	X
Crediti (accounts receivable)		
Verso clienti (customer accounts)	X	
Verso societa collegate (associated companies)	X	
Altri crediti (other receivables)	X	
Effetti attive (other claims)	X	
Anticipi a fornitori (advance to suppliers)	X	
Totale	X	
Fondo Svaluatazione crediti (allowance for uncollectables)	X	X
Rimanenze di Magazzino (inventory)		
Materie prime (raw materials)	X	
Semilavorati e lavori in corso (works in process)	X	
Prodotti finiti (finished goods)	X	
Materiali di consumo (supplies)	X	
Totale	X	
Fondo deprezzamento merci (allowance for decline in value)	X	X
Ratei e Risconti attivi		
Ratie attivi (prepared expense)	X	
Risconti attivi (advanced payments)	X	X
Totale Attivo Disponibile (total current assets)		X
Attivo Immobilizzato (long-term assets)		
Immobilizzazioni Finanziarie (long-term investments)		
Anticipi a formitori in c/impianti (deposits)	X	
Effetti attivi scadenti oltre l'anno (claims due beyond year)	X	
Crediti verso collegate (claims on associated companies)	X	
Partecipazioni (equity investments — detailed)	X	
Depositi cauzionali (other deposits)	X	X

ATTIVO (cont.)		
Immobilizzazioni Techniche (plant and equipment)		
Terreni e fabbricati (land)	X	
Macchinari e anologhe immobilizzazioni (machinery and equipment)	X	
Impianti (building)	X	
Automezzi (motor vehicles)	X	
Mobil: (furniture)	X	
Totale	X	
Fondo ammortamento (dettaglio a parti) (allowance for depreciation [detailed])	X	X
Immobilizzazioni Immateriali (intangibles)		
Costi pluriennali da ammortizzare (Avviamento, spese di costituzione, di primo impianto, ecc.) (goodwill, organization cost, etc.)	X	
Brevetti, concessioni, marchi di fabb (patents, licenses, etc.)	X	X
Totale Attivo Immobilizzato (total fixed assets)		X
Totale Attivita (total assets)		X
Conti D'Ordini (contra accounts)		
Impegni e rischi (liabilities and risks)	X	
Valori a custodia e a cauzione (securities in custody)	X	
Riprese fiscali (revenue recovery)	X	X
Totale		X
PASSIVO (liabilities)		
Debiti a breve scadenza (current liabilities)		
Banche c/debitori (bank loans)		X
Debiti (accounts payable)		
Verso formitori (supplies)	X	
Verso societa collegate (associated companies)	X	
Altri debiti (other)	X	
Effetti passivi (other liabilities)	X	
Anticipi da clienti (customer deposits)	X	X
Fondo imposte (tax liability)		X
Ratei e Risconti passivi		
Ratei passivi (advance payments)	X	
Risconti passivi (deferred credits)	X	X
Totale Debiti A Breve Scadenza (total current liabilities)		X

PASSIVO (cont.)		
Debiti consolidati (long-term debt)		
Obligazioni c/capitale (debenture)	X	
Debiti con garanzia reale (secured bonds)	X	
Fondo indennita licenziamento (liability for severance pay)	X	
Debiti per finanziamento amedio termine (other loans)	X	
Totale Debito Consolidati (total long-term debts)		X
Totale Passivita (total liabilities)		X
PATRIMONIO NETTO (net worth)		
Capitale Sociale (registered capital)		X
Riserve di capitale (capital reserves)		
Riserva sovrapprezzo azioni	X	
Fondo di rivalulutazione (revaluation)	X	X
Riserve di utili (appropriation)		
Riserva legale (legal)	X	
Riserve statutarie (statutory)	X	
Riserve facoltative (optional)	X	X
Utili esercizi precedenti (retained earnings)	X	
Utili d'esercizio (current year profit)	X	
Totale Patrimonio Netto (total net worth)		X
Totale Passivita e Patrimonio Netto (total liabilities and net worth)		X
CONTI D'ORDINE (contra accounts)		
Creditori per impegni e rischi	X	
Creditori per valori a custodia e a cauzione	X	
Riserva tassata (tax reserve)	X	X
Totale		X

Illustrative Income Statement, Italian Company, Period Covered

RICAVI DALLE VENDITE			
Ricavi (sales)	X		
—Sconti, abbuoni e resi (less discounts, allowances, etc.)	X	X	
COSTO DEL VENDUTO (cost)			
Rimanenze iniziali (beginning inventory)	X		
+Aquisti (purchases)	X		
+Costi di lavorazione (manufacturing costs)	X		
(Mano d'opera e costi generali industriali) (labor and manufacturing costs)			
Totale	X		
—Rimanenze Finali (ending inventory)	X	X	
Utile Lordo Industriale (manufacturing profit)		X	
—Quote Ammortamenti immobilizzazioni techniche (depreciation)	X		
—Costi generali amministrativi (administrative)	X		
—Costi generali commerciali (commercial)	X	X	
Utile Operative (operating profit)		X	
ALTRI PROVENTI ED ONERI (other income and costs)			
Proventi finanziari			
Dividendi su partecipazioni (dividends)	X		
Interessi su titoli a redito fisso (interest on fixed income securities)	X		
Plusvalenze su titoli realizzati (profit on sale of securities)	X		
Altri proventi (other income)	X	X	
Redditi immobiliari (rental income)		X	
Altre plusvalenze partimoniali (other capital gains)		X	X
Quote ammortamenti costi pluriennali e immobilizzazioni immateriali (amortization of organization costs and other intangibles)	X		
Oneri finanziari (financial charges)	X		
Perdite varie (various losses)	X		
Accantonamento ai fondi rischi, svalutazioni, ecc. (provision for addition to bad debts and other allowances)	X		
Minusvalenze patriniali (capital losses)	X	X	
Totale altri proventi ed oneri (total other income and expenses)		X	X
Utile D'Esercizio Al Lordo Delle Imposte (net profit before taxes)			X
Oneri Tributari (taxes)			X
Utile Netto D'Esercizio (net profit)			X

Exhibit 2. Illustrative Balance Sheet, Italian Company, December 31, 19___

ATTIVO (assets)		
IMMOBILIZZAZIONI (fixed assets):		
IMMOBILI (land and buildings)	X	
IMPIANTI E MACCHINARIO (plant and machinery)	X	
MOBILI (furniture)	X	X
TITOLI (investments):		
PARTECIPAZIONI (equity investments)	X	
TITOLI A REDDITO FISSO (fixed income securities)	X	X
MERCI (inventories)		X
CASSA (cash on hand)		X
CREDITI (accounts receivable):	X	
VERSO CLIENTI (customers)	X	
VERSO BANCHE (banks)	X	
VERSO SOCIETA COLLEGATE (associated companies)	X	X
RISCONTI E PARTITE VARIE (prepaid expenses and miscellaneous)		X
CAUZIONI DEGLI ADMINISTRATORI (directors' bonds)		X
ALTRI CONTI D'ORDINE (contra accounts)		X
		X
PASSIVO (liabilities)		
CAPITALE SOCIALE (capital)		X
RISERVE (reserves):		
LEGALE (legal reserve)	X	
STRAORDINARIA FACOLTATIVA (extraordinary reserve)	X	X
FONDO AMMORTAMENTO DELLE IMMOBILIZZAZIONI (depreciation reserve)		X
DEBITI A SCADENZA DIFFERITA (long-term debt)		X
DEBITI CORRENTI (current liabilities):		
VERSO FORNITORI (suppliers)	X	
VERSO BANCHE (banks)	X	
VERSO SOCIETA COLLEGATE (associated companies)	X	X
RISCONTI E PARTITE VARIE (advance payments and miscellaneous liabilities)		X
UTILE DA RIPARTIRE (profits for distribution):		
AVANZO UTILI INDIVISI ESERCIZI PREC. (retained earnings of previous years)	X	
UTILE DELL'ESERCIZIO (current year's profits)	X	X
CAUZIONI DEGLI ADMINISTRATORI (directors' bonds)		X
ALTRI CONTI D'ORDINE (contra accounts)		X
		X

Illustrative Income Statement, Italian Company, Statement of Profit and Loss

COSTI (cost)			
RIMANENZE INIZIALI (opening balances):			
MERCI (inventories)		X	
DIVERSE: SALDO ATTIVO RISCONTI (miscellaneous: advance payments)		X	X
ACQUISTI (purchases)		X	
COSTI ED ONERI VARI DI LAVORO (labor costs and related expenses)		X	
COSTI DIVERSI DE ESERCIZIO (miscellaneous operating costs)		X	
ONERI TRIBUTARI (taxes)		X	
ONERI FINANZIARI (financial expenses):			
INTERESSI (interest)	X		
QUOTA AMMORTAMENTO COSTO E DISAGGIO EMISSIONE MUTUI OBBLIGAZIONARI E IPOTECARI (amortization and discount expenses on debenture and mortgage loan issues)	X	X	X
AMMORTAMENTO DELLE IMMOBILIZZAZIONI (depreciation on fixed assets)			X
MENO, RIMANENZE FINALI (less, closing balances):			
MERCI (inventories)	X		
DIVERSE: SALDO ATTIVO RISCONTI (miscellaneous: advanced payments)		X	X
UTILE DELL'ESERCIZIO (net profit for the year)			X
			X
RICAVI			
RICAVI VENDITE (sales)			X
REDDITI IMMOBILIARI (income from real property)			X
PROVENTI FINANZIARI (income on investments):			
DIVIDENDI SU PARTECIPAZIONI E CREDOLE (dividends and interest)			X
PROVENTI DIVERSI (miscellaneous income)			X

Economic Perspective and Accounting Practices in South Korea

PHILIP C. CHENG AND TRIBHOWAN N. JAIN*

International accounting has become a main part of the expanding scope of the accounting profession. Interest in international accounting stems, in part, from the increasing number of companies which have facilities abroad. As American government and business have extended their activities throughout the world, foreign operations have become increasingly important to accountants in the United States. Simply understanding procedures for applying exchange rates to foreign financial statements does not constitute an adequate knowledge of international accounting. The modern accountant must interpret financial information based on the accounting concepts and principles of the country where the commercial activity occurs. Without a knowledge of foreign accounting practices, communication using accounting terminology and techniques is next to impossible.

*Philip C. Cheng is associate professor of accountancy at Northern Illinois University at DeKalb. He holds a Ph.D. degree from Louisiana State University at Baton Rouge. Dr. Cheng has written numerous articles for professional journals in England, New Zealand, and the United States, and is the author of *Steamship Accounting*. Additionally, he has served as a consultant to the Computer Sciences Corporation, the McKinsey and Company, Inc., and the U.S. Maritime Administration.

Tribhowan N. Jain, visiting associate professor of accounting at the University of Florida at Gainesville, holds a Ph.D. degree from Michigan State University at East Lansing. Dr. Jain has authored articles for professional journals in India and the United States.

The authors are indebted to Messrs. Kyung Hoen Choung (M.B.A.) and Lloyd H. S. Shin (M.B.A.) for their generous assistance in collecting some of the data.

The development of accounting practices in any country depends greatly upon the prevailing condition of its socioeconomic environment. Likewise, the development of a national economy is influenced by existing socioeconomic policies. The Republic of Korea,[1] also called South Korea, is likely to be ranked among the most rapidly developing countries. Social stability and low production costs have made South Korea one of the most attractive foreign investment areas in the world. International cooperation rarely has a more sound basis than that of international understanding. This study attempts to further this goal of better communication among countries.

There is a close relationship between accounting and economics. This article will attempt to discuss the economic activity in South Korea with emphasis on all aspects of accounting. Before presenting the modern accounting profession in South Korea, it is necessary to discuss the characteristics of its economic and social environment. Meanwhile, the role of government in economic control and accounting policy will be mentioned throughout. An investigation of the foreign investment opportunities will follow, and then some tax features will be given special attention.

ECONOMIC AND SOCIAL ENVIRONMENT

The South Korean economy can be characterized by an abundant labor force, a poor level of technology, and a shortage of capital and natural resources. These characteristics have been imposing economic, political, and social constraints on South Korea throughout its history. The real problem of the economy lies in the lack of capital.

Unlike the United States, no labor problems exist in South Korea. A large pool of manpower is available; most have a high school education. Labor has not had a chance to organize because the history of Korean free enterprise is very short — a little more than twenty years. Both government and management have maintained a cool attitude toward the idea of labor organization. No major work interruption has occurred to date. The law prohibits the use of violent or destructive

[1] The Koreans have a long and proud history. As early as the twelfth century, B.C., they called their country Chosen, which means "morning calm." Korea is a peninsula that juts into the Sea of Japan and its location between China and Japan has had important effects on its history, culture, and economy. Since the Korean War ended in 1953, the peninsula has been divided into two countries. In the south, the Republic of Korea is an independent country supported by the United States. There are 31 million people in the 38,000 square miles of the peninsula. To the north is the Korean People's Republic, or North Korea, with a population of 13 million and an area of 47,000 square miles.

Exhibit 1. Sources and Uses of Capital by Sector in 1969 (Millions of Dollars)

	Financial Institution	*Govern-ment*	*Corpo-ration*	*House-hold*	*Foreign*	*Total*
Source (Including transfer from overseas)	39.7	377.0	278.3	510.0	716.0	1,921.0
Investment	41.2	525.0	1,085.3	269.5		1,921.0
Surplus or deficit	(1.5)	(148.0)	(807.0)	240.5	716.0	

Source: The data were obtained from the Bank of Korea in South Korean currency (won) and the amount was converted into dollars. (1 dollar = 380 wons.)

acts in labor disputes. Wages are normally established at the prevailing level on the free labor market. The standard work week is eight hours per day, six days per week.

In 1969, national capital investment in South Korea totaled $1,921 million. Exhibit 1 indicates the amount generated internally by each sector of the economy and from which sector the capital shortage was met. Foreign and household sectors have furnished a net surplus of capital.

On the other hand, government and private business sectors have been faced with a critical shortage of capital. This is particularly true for private corporations whose capital shortage has been met by an inflow of foreign capital.

The preceding capital flows statement discloses a contrasting situation with that of developed countries, especially the United States. In most American companies, the internal sources of corporate capital are shareholders' investments and retained earnings. Any further needs for capital are usually met by bond issues and short- or medium-term bank borrowings. The capital inflow into the securities markets and financial intermediaries arises originally from household savings. The corporate capital demand in South Korea, unlike the United States, is supplied largely by foreign investments, not by household savings. These savings have supplied capital to the corporate sector but are inadequate to cover the shortage. In 1969, foreign capital investment in South Korea accounted for 37 percent of the total capital investment. The need for foreign capital tends to increase as the economy grows.

Economic growth in South Korea has been remarkable. In the past several years, it has grown at an average rate of 11.4 percent. The gross national product (GNP) in 1970 was approximately $7.7 billion, with

exports approaching $1.0 billion. The country received nearly $4.3 billion in American economic assistance through 1970. Korean businessmen have not always been satisfied with the rate of inflow of investment from the United States and have sought additional investment capital from Japan. As of July 1970, Japan's private investment totaled $47.1 million — less than half of the American amount but the trend was clear.[2]

In South Korea, banks play an essential role in corporate financing. This is partly because banks supply a substantial portion of external capital and partly because there are no other large financial institutions which can supply a large amount of money to business enterprises. There are thirteen banks in the country, eight of which are government-owned.[3] The functions of commercial banks are similar to those in the United States. Special banks are under the direct control of the government and provide special banking services.

The annual rate of interest generally charged by commercial banks is 24 percent or more. An interest rate less than 24 percent is considered to be a preferential rate. Preferential rates are specified by the government and are granted to certain types of enterprises to develop and industrialize the national economy. Preferential rates range from 6 percent on export credit to 20 percent on long-term loans for small- and medium-sized business enterprises.

There are many reasons why South Korea has failed to develop a sound and active stock market. One of the detrimental factors is the high inflationary pressure. Such inflationary periods cause investors to lose money in real terms and, consequently, the stock exchange loses some of its popularity. Furthermore, corporations do not wish to float new issues in a high inflationary period; a better method of financing is to borrow money. Many large businesses are able to borrow from special banks. Finally, both businessmen and the general public do not have the experience of using the stock exchange as an investment outlet. Some also distrust the stock exchange because of some recent cases of

---

[2] For the full story, see Samuel Jameson, "Korea Seeks U.S. Capital," *Chicago Tribune*, 6 July 1971.

[3] South Korea has five commercial banks: the Choheung Bank, the Commercial Bank, the First City Bank, the Hanil Bank, and the Seoul Bank. In addition, there are seven special banks aside from the Bank of Korea: the Korea Exchange Bank, the Korea Development Bank, the Medium Industry Bank, the Citizens National Bank, the Korea Housing Bank, the Korea Trust Bank, and the National Agricultural Cooperatives Federation. Six foreign banks — the Chase Manhattan Bank, the First National City Bank of New York, the Bank of America, the Tokyo Bank, and the Mitsubishi Bank, and the Chartered Bank — have established branches in Seoul.

fraud. At the end of 1966, thirty-two companies were listed on the stock exchange; this number increased to fifty-two by the end of 1971.

The government attempted to develop a sound stock exchange. In April 1963, a major amendment was made to the national Security Exchange Act. The revised act stipulates that the balance sheet, income statement, and other supporting schedules concerning the financial affairs of a corporation whose stock is listed on the stock exchange must be audited and certified by independent accountants. Audits of financial statements by independent accountants were rare until the amendment of 1963. Since that time, a legalistic basis for independent audits by certified public accountants has been established in South Korea. This should accelerate economic development and modernization by inducing confidence in investors.

Another peculiar characteristic of South Korea's money market is the existence of an unorganized money market or private money market. The term is generally used in that country to indicate the private credit activities occurring outside banking and other financial institutions. The unorganized money market plays a substantial role in business financing. Two traits of the unorganized market are that both the lender and the borrower deal with one another on a person-to-person basis. The rate of interest is very high (50 percent annually) and has fluctuated little in the last several years despite changes in bank interest rates. Firms have several reasons for utilizing such expensive loans: available bank loans are not adequate to meet the demand, bank loan approval procedures are too complicated and sometimes too cumbersome, and unorganized money market loans do not require mortgages or collateral. As long as the banks cannot fully meet the demand, the unorganized money market will continue to play an important role, especially as a marginal money supplier.[4]

THE ECONOMIC SYSTEM

There has been a controversy about whether the South Korean economy is basically a free enterprise or a socialistic system. The government has attempted to convince its citizens that South Korea has a free enterprise economy but many economists argue that the country has a socialistic system to a considerable degree. Economic planning is not a concept of a free enterprise system, but rather a product of a socialistic economic system. South Korea's economic planning

[4] Research Institute for Economics and Business, Sagang University, *A Study of Money Market and Industrial Investment Financing in Korea* (Seoul, South Korea, 1970), pp. 44-68.

has already drawn much worldwide attention because it is quite sophisticated: it furnishes considerable control over the economy. The South Korean economy is a mixture of free market and socialistic systems.

Most of the capital flows either directly from governmental institutions or private institutions under governmental guidance. The policy tools most often used by the South Korean government are the monetary and fiscal policies usually used in other typical free enterprise systems to influence the private sector of the economy, but in South Korea governmental influence goes far beyond this point. It actively participates in normal business activities such as banking, manufacturing, mining, transportation, and utilities.

The government also owns major production facilities; there are three reasons for this. First, Korea was a colony of Japan until 1945. All large industries were controlled either by the Japanese government or Japanese nationals. After World War II, the newly established Korean government confiscated all industries from the Japanese and later sold some of them to Korean citizens. Most of the important industries are still owned by the government. Second, the government has monopoly rights for trading in such products as salt, cigarettes, and ginseng.[5] Third, the government has invested directly in numerous industries. In 1969, for example, the government's investment accounted for 29 percent of total investment in South Korea.

Economic modernization is expected to be realized by increasing capital accumulation. This is the national goal of South Korea. The first five-year economic development plan was initiated in 1962. The government wishes to build the economy by following the Japanese model of exporting heavily to the United States.

In 1963, the GNP of South Korea was $1.5 billion. If the third five-year economic development plan proves successful, the GNP will rise to $13.5 billion by 1976.[6]

A HISTORICAL REVIEW OF ACCOUNTING

As indicated earlier, Korea won independence from Japan at the end of World War II.[7] The prevailing accounting system used by all

[5] Ginseng is an herb with a long fleshy root that can be used as medicine.

[6] Samuel Jameson, "Seoul Models Economy on Japanese," *Chicago Tribune,* 1 June 1971.

[7] For hundreds of years, Korea was under Chinese influence. The Japanese won a war with China in 1895, and Japanese influence in Korea became stronger than Chinese. The Russians challenged this influence, but they lost the Russo-Japanese War of 1904-5. A treaty gave Japan control over Korea's foreign affairs in 1910. Japan annexed Korea for the next thirty-five years and de-

companies in South Korea is based on the bank slip system introduced by the Japanese after the annexation of Korea in 1910.[8] The Japanese learned of this system from the United States in 1872. Intercourse between Korea and Japan has been minimal since Korean independence in 1945.

The slip serves as a medium for recording the accounting entry of either a debit or a credit. The cash receipt slip records a receipt of cash as a debit to the cash account and a credit to a contra account such as sales or accounts receivable. The cash payment slip records a credit to the cash account and debit to an asset, a liability, or an expense account. The transfer entry slip is used for noncash transactions. Based on source documents, a slip is prepared to record a business transaction. After numerous approvals by clerical, supervisory, and executive personnel, the slip and supporting documents are ready for accounting processing.

As in many Oriental countries, public accounting in South Korea is a relatively new profession. Until 1950 there were only a few accountants in public practice and the demand for their services was modest. Statutory examiners were assigned to assure compliance with legal requirements for corporations. Generally they were full-time employees performing routine audit functions. No regulations existing described the personnel qualifications for this position.

In 1970 the first law regulating public accountants was enacted. Three years later, regulations implementing the law were promulgated by presidential order. This is important to the history of South Korean public accounting because it prescribed the basic ground rules for the profession. In December 1954 the Korean Institute of Certified Public Accountants, which remains the only accounting organization in South Korea, was formed.

In summary, the most important events in the accounting history of South Korea are presented in chronological order.

1919 The late Jung H. Yoon began his practice as the CPA representative of Korea to handle bankruptcy cases after World War I.

1927 Several Koreans who graduated from schools of business in Japan registered as CPAs and began their practice in Korea and Japan.

1948 A few Korean accountants were appointed to examine the

veloped the Korean economy to benefit only the Japanese. Korea won independence in 1945. More than $4 billion of economic aid has been granted the country by the United States since independence and accounting practices in South Korea have been greatly affected by American practices.

[8] See Kyojira Someya, "The Slip Accounting System: Traditional Bookkeeping Procedures in Japan," *International Journal of Accounting* (Fall 1971): 99-114.

former Japanese properties. This marked the first occasion that the government agency utilized the assistance of CPAs.

1950 The CPA law was enacted.

1954 The Korean Accountants Association was organized in Seoul with thirty-six members.

1955 The first CPA examination was held.

1959 Everett J. Mann, an American CPA and adviser to the United States Operations Missions, wrote the book *Auditing Practice Guides,* the first auditing guide translated into Korean and distributed to Korean CPAs.

1963 A required audit of financial statements was adopted under the Security Exchange Act.

1966 The Korean Accountants Association was changed to the present name, Korean Institute of Certified Public Accountants (KICPA), and a new professional magazine, *Accounting,* was published.

ACCOUNTING EDUCATION

In the midst of an apparent oversupply of general labor, South Korea has an acute shortage of certain skilled and professional manpower. This shortage is critical in the senior category of public and industrial accountants.

The development of accounting education has not yet succeeded as much as other academic fields since the movement toward industrialization. Approximately twenty colleges and universities offer baccalaureate programs in accounting. Of these, only the University of Seoul National has an advanced accounting program. The others remain quite elementary. One of the national tasks is to insure that accounting students do not suffer a deficiency in professional training.

PROFESSIONAL REQUIREMENTS

The designation of certified public accountant is conferred by a government agency, the CPA Examination Committee, which prescribes the requirements for this professional recognition. Committee members are appointed by the minister of finance from the ranks of well-known academicians and practitioners. The vice-minister of finance chairs the committee.

CPA certificates are issued to those who pass three levels of examinations — preliminary, intermediate, and final. Examinations are usually held once a year. In addition to the requirement of good moral standing, a preliminary examination is required of all those who have not finished sophomore-level courses in an accredited college or uni-

versity. This examination includes material in English, mathematics, bookkeeping, Korean history, and an introduction to law.

The subjects covered by the intermediate examination are auditing theory, cost accounting, theory of accounts, economics, and business law. A candidate may be exempt from this examination if he is either:

1. An instructor who has taught accounting for more than four years or an assistant professor or above who has taught accounting for more than three years; or
2. An assistant section head or above who has done accounting, auditing, or tax work in the government for more than three years; or
3. An assistant section head or above who has dealt with financial affairs in a bank for more than five years; or
4. A captain or above who has dealt with accounting or auditing in the armed forces for more than five years.

Such waivers were enacted because the government initially intended to secure a large number of CPA candidates. Although this is a transitional situation, waivers should be discontinued to improve the quality of professional knowledge and competence.

Those who have passed the intermediate examination and subsequently have completed a two-year course of study in accounting practices at an accredited institution or have assisted a CPA for two years in the auditing or the analysis of financial affairs are eligible to take the final examination. This examination includes knowledge of taxation, auditing practice, and analysis of financial statements. The successful candidate is encouraged to join the Korean Institute of Certified Public Accountants.

As noted earlier, foreign loans and investments have played an important role in the development of the nation's economy and a foreign accountant can be admitted to practice in South Korea. A person who has met requirements in a foreign country corresponding to the Korean CPA qualifications and has sufficient knowledge of Korean laws and ordinances relating to accounting may apply to the Ministry of Finance for approval to practice as a foreign CPA. Many applicants have been successful. Some American firms have established offices or affiliations with Korean accountants who have organized offices throughout the country.[9] This is attributable to close economic relations with the United States since Korean independence in 1945.

[9] For example, the Lybrand, Ross Bros. & Montgomery, the Peat, Marwick, Mitchell & Co., and the Price Waterhouse & Co. have established offices or correspondent firms in Seoul, the capital of South Korea.

PROFESSIONAL ETHICS AND AUDITING STANDARDS

The Korean Institute of Certified Public Accountants issued a code of professional ethics in November 1961 which was closely modeled after that of the American Institute of Certified Public Accountants (AICPA). Every member of the institute is bound by the code and is subject to disciplinary action for any violation. Any violation may be punished by the Ministry of Finance by registration suspension up to one year or, in a serious case, by cancellation of membership.

Seven of seventeen rules are identical to those of the AICPA. The Korean code does not discuss partnerships because the partnership form of a CPA firm is unusual. A Korean public accounting firm is characterized by one CPA with one or more assistants.

Under the code of professional ethics of the AICPA, the accountant must be independent of any enterprise he audits and the relationship of the accountant with his client must be such that it will appear to be independent to third parties. This is not true in South Korea.

There were 1,059 certified public accountants in 1971. Less than 30 percent are employed by CPA firms. Some conduct their own businesses and are permitted to audit their own financial statements. This fact seriously hampers the profession.

Only fifty-two companies are legally subject to external audit and since there are 1,059 CPAs, some solicit clients by lowering fees. This custom has impaired the dignity of and the confidence in the profession.

In April 1961, the Korean Institute of Certified Public Accountants issued a statement of auditing standards. The KICPA statement provides for most of the standards contained in the pronouncements of the AICPA.

General standards are identical to those of the AICPA; in addition to the three standards of the AICPA, the KICPA provides two more. One is related to the confidential relationship with the client, and the other is concerned with the auditor's legal liability. The auditor seems to have no legal liability under this standard. In the opinion of the authors, this standard should be deleted in the interests of both the client and the public.

If the auditor is later shown to have certified inaccurate statements, or if his statements are later shown to have included a significant error or omission due to a lack of adequate professional care, he is considered guilty in South Korea. In either of these cases, his license to practice may be cancelled or he may be suspended from practice for one year. However, this clause is very vague and different legal interpretations are possible.

Three standards of field work are identical to those of the AICPA. The fourth standard included in the standards of reporting of the AICPA is not clearly stated in the Korean standards.

FUNCTIONS OF ACCOUNTANTS AND AUDITORS

Accountants and auditors in South Korea may be classified into three groups: certified public accountants, governmental auditors, and statutory examiners. Their functions are discussed below.

As discussed previously, the CPA examination is formally and carefully administered, and to pass it is a mark of achievement. The successful candidate is allowed to practice public accounting under the title of CPA. Only fifty-two corporations are listed on the stock exchange and their financial statements must be audited by a CPA; other companies are not legally subject to the external audit by a CPA. Accountants other than CPAs play a vital role in the nation's economy.

Governmental auditors relate to government officers or institutions which are legally allowed to audit certain organizations. A brief explanation follows:

1. Board of Audits. The board was organized according to the constitution. It is responsible for the examination of the statement of revenues and expenditures of the nation, the accounts of governmental agencies, and the duties of civil servants. It can also examine the records of credit unions if they receive subsidies from the government.
2. Board of Bank Supervision. Under the Bank of Korea Act, this board was established in the central bank. It engages in the supervision and annual audit of all banking institutions.
3. Other official auditors. The representatives of the minister of finance can audit government-owned banks and business enterprises.

The Korean public accounting profession is very young and the concept of the independent audit is still new but the status of statutory examiners cannot be overlooked. The commercial law prescribes that the statutory examiner be appointed in the shareholders' meeting. The statutory examiner examines accounting records and expresses an opinion on financial statements. He can review and investigate operations if necessary.

No legal requirement that the statutory examiner be an external auditor or independent accountant exists. In other words, his qualifications are not stated in the law. A person with no knowledge in accounting can be elected. Furthermore, a one-week period is custom-

arily given for him to examine the financial statements so that his audit is forced to be nominal and superficial. Finally, since the statutory examiner is usually an employee of the company, his independence is questionable.

FOREIGN CAPITAL ATTRACTIONS

It would be desirable that the domestic capital formation finance the nation's investment for planned economic growth. But domestic capital is usually a function of national income and other policy variables and it cannot be increased suddenly. For this reason many developing countries rely heavily on foreign capital to cope with capital shortage in the process of economic development; this is the case in South Korea.

The country's basic policy toward foreign investment is stipulated in the Foreign Capital Inducement Law. This law is designed to encourage foreign capital programs conducive to the sound development of a self-sufficient national economy and to improve its international balance of payments. This policy gives priority to industries that (1) seek to utilize the natural resources of the country to a greater degree, (2) make products primarily for export purposes, (3) create employment opportunities for the Korean people, and (4) bring modern and beneficial technological innovations into the country.

This legislation has provided foreign investors and lenders with a favorable legal climate and has accelerated the tempo of economic growth in South Korea. The most liberal and attractive incentives are:

1. Exemption and reduction of taxes. Corporations financed by foreign capital are free from corporate income tax, property tax, and property acquisition tax for the first five years in proportion to the ratio of capital owned by foreign investors to the total capital. A 50 percent reduction of these taxes is allowed for the next three years. Income taxes on dividend and interest income are also exempt for the first five years and a 50 percent reduction is allowed for the following three years.
2. Guaranteed remittance of principal, interest, and dividends. Unlimited remittance of profit and interest payments is guaranteed. As much as 20 percent of principal may be repatriated annually, two years after the initial operations of a business. In case the business is liquidated, the return of the entire principal to a foreign investor is allowed.
3. Foreign ownership. Foreign investors may own 100 percent of the stock of a corporation. There is no restriction on the percentage of interest that may be owned in a business firm by a foreign investor.

Exhibit 2. Tax Rates Schedule

Taxable Income (in won)	*Basic Deduction (in won)*	*Tax Rate (in percent)*	*Cumulative Deduction (in won)*
15,000– 24,999	15,000	7.7	0
25,000– 34,999	15,000	9.9	220
35,000– 44,999	15,000	12.1	660
45,000– 74,999	15,000	15.4	1,650
75,000– 94,999	15,000	22.0	5,610
95,000–114,999	15,000	29.7	11,770
115,000–164,999	15,000	37.4	19,470
165,000–214,999	15,000	46.2	32,670
215,000 and over	15,000	55.0	50,220

Note: 1 dollar = 380 wons.

4. Reinvestment of profits permitted. A foreign investor may reinvest in the same or another foreign company in South Korea up to the amount of his original investment. If the reinvestment in the same industry exceeds the original amount, governmental approval is required.
5. Property protection. All property of foreign enterprises is protected from requisition or expropriation under pertinent laws and decrees. The same rights, privileges, and protection enjoyed by Korean nationals are extended to foreign investors and their properties.

IMPACT OF TAXES ON BUSINESS ACTIVITIES

Businessmen are assumed to strive for the maximization of profits in the long run. Taxation is a significant factor to be considered in planning alternative courses of action to achieve this objective. The three types of major tax burdens in South Korea — individual income, corporate income, and business taxes — will be considered. The discussion will particularly center around the latter two taxes.

Any individual who lives in South Korea for over six months or who receives payment for services rendered in that country in the form of wages, salaries, dividends, or interest income, or who receives income from property or a business located in the country, is subject to the assessment of individual income tax. Foreigners, who are employed by the foreign companies under the Foreign Capital Inducement Law, are exempt from the individual income tax.

The individual income tax is progressive. Few generalizations can be made concerning the tax rates as they are frequently changed by legislation. There is only one tax rates schedule. Exhibit 2 shows the latest schedule effective in 1971.

Exhibit 3. Tax Rate Schedule 1

Taxable Income (1 dollar = 380 wons)	*Tax Rate*
Under 1,000,000 wons	25%
1,000,000–5,000,000 wons	35%
Over 5,000,000 wons	45%

Tax Rate Schedule 2

Taxable Income (1 dollar = 380 wons)	*Tax Rate*
Under 1,000,000 wons	15%
1,000,000–5,000,000 wons	20%
Over 5,000,000 wons	25%

To illustrate the computations of tax due, the following formula is used:

$$\text{Tax due} = (\text{taxable income} - \text{basic deduction}) \times \text{tax rate} - \text{cumulative deduction}$$

Assume that an individual's taxable income for the year is 35,000 wons. His tax is 1,760 wons computed as follows:

$$\text{Tax due} = (35{,}000 - 15{,}000) \times 0.121 - 660 = 1{,}760 \text{ wons}$$

The taxable income of a business firm is determined in much the same manner as that of an individual taxpayer. Gross income less allowable deductions equals taxable income, but there are two tax rate schedules applicable to different cases. To describe the applications, the two rate schedules are depicted in exhibit 3.

To illustrate computations, it is hypothesized that a company has a taxable income of 6,000,000 wons. If tax rate schedule 1 is used, the taxpayer's liability is 2,100,000 wons shown as follows:

$$\begin{aligned} 1{,}000{,}000 \times 0.25 &= \phantom{1{,}}250{,}000 \text{ wons} \\ 4{,}000{,}000 \times 0.35 &= 1{,}400{,}000 \\ 1{,}000{,}000 \times 0.45 &= \underline{\phantom{1{,}}450{,}000} \\ \text{Total tax due} &= 2{,}100{,}000 \text{ wons} \end{aligned}$$

If tax rate schedule 2 is used, the total tax due is reduced to 1,200,000 wons as calculated below.

$$\begin{aligned} 1{,}000{,}000 \times 0.15 &= \phantom{1{,}}150{,}000 \text{ wons} \\ 4{,}000{,}000 \times 0.20 &= \phantom{1{,}}800{,}000 \\ 1{,}000{,}000 \times 0.25 &= \underline{\phantom{1{,}}250{,}000} \\ \text{Total tax due} &= 1{,}200{,}000 \text{ wons} \end{aligned}$$

There is a sizable difference between the above calculations under the two tax rate schedules. Which schedule, 1 or 2, should be used?

In essence, the selection of tax rate schedule rests on the source of equity capital of a business firm. If a corporation is owned by a relatively small number of shareholders, it is subject to the higher rates of tax rate schedule 1. Otherwise, the lower rates of tax rate schedule 2 are applicable. In order for a company to use the lower rates, it must meet the following requirements:

1. The firm must have at least 100 minority stockholders. A minority stockholder is defined as a stockholder who owns 3 percent or less of the outstanding shares.
2. The stocks owned by all minority interests must account for at least 30 percent of the total outstanding shares.
3. The majority stockholder must not own more than 60 percent of the total outstanding shares.

Any corporation meeting the above three requirements may use the lower tax rate schedule. These requirements seem rather easy to meet in the United States, but such is not the case in South Korea where the concept of a stock exchange is new to both entrepreneur and investor. In addition, family ownership is still prevalent in the business community. To secure equity capital by public offering is not popular. The above statute is designed (1) to use the stock market as a means to develop the economy and (2) to prevent the concentration of ownership which may deprive the small investors of investment opportunities.

The tax law allows the unlimited carry-forward of losses, as compared to five years in the United States, but does not allow the carryback of losses. The double-declining balance method of depreciation is used in all industries, except mining. The straight-line method is used to amortize intangibles. Business firms which derive their income from foreign sales can enjoy a 50 percent deduction.

The business tax is unique in South Korea. There is no such equivalent tax levied in the United States. The tax is imposed on all profit-seeking business organizations and is payable twice a year, in June and December. It is levied on gross revenue, not profit. All business firms are subject to the business tax whether they make profits or incur losses, as long as they have some revenue. An argument arises as to the shift of the business tax burden by businessmen to their ultimate customers. In any case the business tax is an additional burden to the firms. The tax rates range from 0.3 to 2.0 percent depending upon the type of industry. A selected business tax rate schedule is illustrated in exhibit 4.

Exhibit 4. Selected Business Tax Rate Schedule

Type of Business	*Group A*	*Group B*
Manufacturing	0.3%	0.7%
Wholesaling	0.3%	0.7%
Retailing	0.5%	1.0%

Source: Revenue Code of South Korea.

As can be seen in the previous schedule, all manufacturers pay either 0.3 or 0.7 percent of their revenue depending on the group they are in. Manufacturers under group A, who pay the lower tax rate of 0.3 percent, include textile, shipbuilding, rail cars, chemical fertilizers, and agrimanufacturing because they are the most urgently needed industries in the early stage of the nation's economic development. All other manufacturers come under group B and pay the higher tax rate of 0.7 percent.

A few types of businesses are exempted from the business tax. They are (1) publishing companies, (2) news media, and (3) export firms. Two separate sets of records are required to distinguish domestic and foreign sales for the firm which is engaged in both domestic and foreign trade.

CONCLUSION

There has been a great expansion of American business and financial activities in international operations since World War II. For many companies these operations consist merely of trading activity with suppliers or customers who are domiciled in other countries. On a larger scale, this growing involvement in foreign operations may take the form of investment in foreign firms or the establishment of foreign subsidiaries, either to carry on productive operations or to serve as sales outlets or both. Consequently, there has been an increasing demand for information on international accounting.

The United States has provided South Korea total economic and military aid exceeding $8 billion since its independence in 1945. The aggregate American private investment of more than $120 million still tops the list of all foreign investments in that country. Several important factors directly or indirectly related to international accounting and foreign operations should be considered.

Until 1961 the economy of South Korea suffered from all the symptoms of underdevelopment — high population growth, low level of per capita income, little capital accumulation, poor industrial struc-

ture, high inflationary trend, chronic deficit in the international balance of payments, and all in all, a painfully slow tempo of economic growth. It was from such a background that the first five-year economic development plan was drawn with the basic objective to accelerate industrialization and achieve self-sustained growth.

With the launching of the first plan in 1962 and the second in 1967, the nation's economy took steps toward modernizing the industrial structure and building the foundation of a self-supporting economy. In 1962 the GNP was approximately $10 billion. The government expects to raise the GNP to $13.5 billion in 1976. Past reliance on the United States as the main export market does not seem likely to change drastically in the near future.[10] Failure to meet export goals would threaten the nation's ability to repay foreign debts that now exceed $3 billion.

With the rapid economic growth and large foreign investments in South Korea, financial data have become more important today than ever before. Success of economic planning is greatly dependent on the adequate allocation of resources and the efficient management of invested capital. Most business firms are in the category of family management. The separation of ownership and management for the purpose of scientific management should not be neglected.

South Korea's economy, accounting education, and accounting profession are still in the developmental stage, but the progress made thus far is encouraging. The need for broader and deeper professional training must be emphasized. Accountants themselves must be self-disciplined and must endeavor to earn public confidence in the profession. The social role and responsibility imposed on the accountant in the developing economy should not be ignored.

---

[10] The international monetary problem and the new economic program of the United States have affected Korean importers and exporters. See William D. Hartley, "Feeling the Squeeze — Small Asian Nations Hurt by Floating Yen, U.S. Textile Quotas, and Import Surcharge," *Wall Street Journal*, 18 November 1971.

Index of Volumes 7 and 8 by Author's Name and by Topic Area

AUTHOR INDEX

SUBJECT INDEX

Accounting Theory

International Accounting

ONE YEAR'S SUBSCRIPTION TO *THE INTERNATIONAL JOURNAL OF ACCOUNTING EDUCATION AND RESEARCH*

Volumes 1 through 7 (1965-72) *(Available by volume or issue also)*	$21.00
Volume 8, Numbers 1 and 2 (1972-73)	3.00
Single-copy issue	1.80

OTHER PUBLICATIONS OF THE CENTER FOR INTERNATIONAL EDUCATION AND RESEARCH IN ACCOUNTING

A Statement of Basic Accounting Postulates and Principles (English Edition)	1.00
A Statement of Basic Accounting Postulates and Principles (Spanish Edition)	1.00
Theory of Accounts in Double-Entry Bookkeeping, by Karl Käfer	2.00
The Evolution of Direct Costing, by Charles Weber	2.00
The Nature and Stages of Accounting Development in Latin America, by Edward Elliott	2.50
Input-Output Analysis and Its Application to Business Accounting, by Shawki Farag	2.50
The Role of Accounting in the Economic Development of England 1500-1750, by James O. Winjum	3.00
Accounting Research 1960-70: A Critical Evaluation, Nicholas Dopuch and Lawrence Revsine, Editors	3.00
Cost Terminology and Cost Theory: A Study of Its Development and Present State in Central Europe, by H. M. Schoenfeld	3.00
Thoughts on Accounting, by A. C. Littleton*	3.00
Pagatoric Theory of Financial Income Determination, by Erich Kosioı*	3.00
Macroaccounting, by S. C. Yu*	3.00

* In preparation.